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WINTER WATERFRONT: YEAR-ROUND USE IN METROPOLITAN TORONTO

Prepared by Xenia Klinger, M.C.I.P.
EKO Consultants

for

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EXECUTIVE SUMMARY

The Metropolitan Toronto waterfront currently generates high quality experiences, recreational and otherwise, primarily during the summer months. There is also great potential however, for much more of the waterfront to be accessible throughout the year; and to be just as beautiful and generate different yet equally high quality experiences during the colder months — or the calendar months from mid-September to mid-May. Harbourfront and the Beaches are exceptional examples of areas already well-used throughout the year.

This report presents a strategy for enhancing and increasing year-round public use and enjoyment of, and access to, the Metropolitan Toronto waterfront. The six recommended policies are geared towards enhancing use of the waterfront particularly in the colder months. The key policy is to ensure safe and comfortable year-round access to the waterfront through the waterfront trail. Facilities should also be provided to accommodate winter activities including the potential for off-season events and programming; and opportunities to ameliorate and to capitalize on the natural environment during the colder months should be examined.

To enhance use of the waterfront in general, it is important to recognise that it is the presence of people which makes a place feel safe; with this added sense of comfort the number of users will increase. The proposed waterfront trail would help to achieve more comfortable connections from the city to the water, from downtown offices to waterfront parks, and from neighbourhoods to the water's edge during the winter and throughout the rest of the year.

While improving year-round access, current waterfront diversity should be maintained and possibly increased. Each individual park, open space or urban waterfront street is unique. It is also important to recognize the users of each park — through surveys if necessary — prior to assessing what additional design enhancements and park facilities, if any, are required.

The policies, guidelines and low-cost initiatives presented in this report could be implemented by local and regional municipalities and conservation agencies. They are based on *Watershed* principles — that the waterfront be clean, green, useable, diverse, open, accessible, connected, affordable and attractive — and on the principle that enhancing waterfront accessibility, diversity, connectedness and useability particularly during the colder months is fundamental to increasing year-round use. The policies espoused should also be applied as appropriate when designing spaces such as urban streets, promenades and outdoor plazas for use in the colder months.

A general evaluation of regional and local waterfront parks within Metropolitan Toronto is provided in Appendix 1 to assess which parks have the best potential to be used year-round. The criteria used to make this assessment encompass both the characteristics of the parks themselves and their relationships with surrounding communities. Consideration is also given to issues such as microclimate amelioration, seating, sun and wind, and facilities increasing comfort particularly during the colder months.

The suggested policies to increase winter use of the waterfront focus on low-cost improvements within budgetary restrictions. For example, to capitalise on the existing environment, more attention should be paid to natural areas where landscapes can flourish with minimal financial investment. To test the report's proposed strategy and policies, Humber Bay Park was selected as a regional park with potential to become winterized at little cost to the MTRCA, the operating agency. An imaginary $100,000 — within the budget of the MTRCA — was allocated to 'winterize' Humber Bay Park East. Low-cost enhancements recommended including the extension of pathways, the addition of deciduous and coniferous trees in strategic places to provide wind and sun protection, and the placement of large rocks and boulders for seating, particularly in areas geared to attracting children.

The next steps to achieving the goal of enhanced year-round use of waterfront parks, promenades, and open space include further technical studies on wind and sun, park user needs surveys prior to adopting and implementing appropriate policies with public input, and co-operation from all levels of government, agencies and special-purpose bodies.

ACKNOWLEDGEMENTS

This study was undertaken at the request of the Board of Trade of Metropolitan Toronto, who appeared at Royal Commission hearings in April of 1990 and suggested that the Commission undertake a study "to explore the possibilities of more wintertime recreational and entertainment activities along the central waterfront." Winter Waterfront represents a step towards enhancing year-round use of the Metro Toronto waterfront, particularly during the colder months. Additional research into the Board's request regarding the economic and social advantages of winter recreational facilities to residents and the tourist industry is addressed in the *Preliminary Master Plan for Garrison Common*, Report 14 of the Royal Commission headed by Berridge Lewinberg Greenberg.

The Winter Waterfront study was prepared by Xenia Klinger for the Royal Commission on the Future of the Toronto Waterfront, in co-operation with a work group comprised of representatives of the Board of Trade of Metropolitan Toronto, the cities of Etobicoke, Scarborough and Toronto, the Regional Municipality of Metropolitan Toronto, the Metropolitan Toronto and Region Conservation Authority (MTRCA) and the Royal Commission.

The author thanks the work group members for their contributions to the report and for their dedication to the study, and those who provided assistance and useful comments throughout the process. The staff of the Royal Commission on the Future of the Toronto Waterfront also contributed substantially to this report. Jiin Kim was particularly helpful in providing assistance in desktop publishing and artwork.

WORK GROUP
WINTER WATERFRONT STUDY

David Carter Chairperson	Senior Director of Special Projects	Royal Commission on the Future of the Toronto Waterfront
Deborah Williams Co-ordinator	Assistant to the Senior Director of Special Projects	Royal Commission on the Future of the Toronto Waterfront
Xenia Klinger	Principal	EKO Consultants
Glenn Miller	Project Manager, Waterfront Division	Metropolitan Toronto Planning Department
Jane Welsh	Planner	Metropolitan Toronto Planning Department
Jo-Anne Egan	Planner	Metropolitan Toronto Planning Department
Maldwyn Williams	Manager, Waterfront Section	City of Toronto Planning and Development Department
Eric Peterson	Urban Designer	City of Toronto Planning and Development Department
Peter Simon	Waterfront Planner	City of Toronto Parks and Recreation Department
David McKillop	Principal Planner	City of Etobicoke Planning Department
Robert Hutchison	Landscape Architect	City of Etobicoke Planning Department
Carlo Bonanni	Planner	City of Etobicoke Planning Department
Mark Edelman	Superintendent of Parks Projects	City of Etobicoke Parks Department

WINTER WATERFRONT STUDY WORK GROUP cont'd

Carl Knipfel	Director of Urban Design	City of Scarborough Planning Department
Robert Stephens	Principal Planner	City of Scarborough Planning Department
Larry Field	Manager of Waterfront Planning	Metro Toronto and Region Conservation Authority
Michael Bender	Landscape Architect	Metro Toronto and Region Conservation Authority
Robert C. Christie	Manager, Education and Urban Affairs	The Board of Trade of Metropolitan Toronto
Rosemary Colucci	Policy Analyst, Education and Urban Affairs	The Board of Trade of Metropolitan Toronto
Martin Collis	Winter Cities Subcommittee	The Board of Trade of Metropolitan Toronto

1. SIX POLICIES TOWARDS ENHANCING YEAR-ROUND USE OF THE WATERFRONT

The Metropolitan Toronto waterfront is a limited resource which currently generates many high quality recreational and other experiences, primarily during the summer months. There is also great potential, however, for much more of the waterfront to be more accessible throughout the year and to be just as beautiful and generate different yet equally high quality experiences during the colder months. Supporting planning policies are relatively rare, but are central to achieving this goal.

The following six policies have been developed in an attempt to provide general direction. They are based on the strategy of enhancing year-round use of the Metropolitan Toronto waterfront (but applicable across the lake Ontario shoreline), using the waterfront trail as the connecting element.

Year-round waterfront recreational policies should -- among other things:

- provide year-round access to parks
- improve the comfort levels of outdoor space
- provide facilities to accommodate desired winter waterfront activities
- increase year-round opportunities for contact with nature
- create a safe environment for all users
- provide opportunities for winter events and programming

1.1 POLICY 1: Provide Year-round Access to Parks

Accessibility to the waterfront is the key to enhancing year-round use. More comfortable connections from the city to the water, from downtown offices to the water's edge, and from neighbourhood homes to waterfront parks are needed during the colder months. The variety of walkways, ranging from the broad promenades at Harbourfront to the modest paths and nature trails on the Toronto Island, reflect the current diversity of waterfront access. While improving year-round access, this diversity should be retained.

In colder seasons, the length and duration of recreational outings will depend partially upon air temperatures and wind protection. On average, people will walk for approximately ten minutes in winter before needing to warm-up. Seniors and children are more susceptible to cold, and their walks and visits are generally much shorter. Visits are often shorter than in the summer, and depend on the nature of the visit, park attractions and available facilities such as washrooms, sheltered seating areas and food outlets. Locating facilities at selected nodal points along the walkways would increase use and promote longer visits.

The Greenway Waterfront Trail proposed by the Royal Commission will accommodate pedestrians and cyclists and provide continuous access to waterfront parks and open spaces and linkages to adjacent areas. To ensure maximum access to the trail and to increase year-round waterfront park use, it should be connected to public transit stops at selected locations. The guidelines presented to enhance year-round access to parks should also be applied to increase year-round use within each park along the waterfront.

The waterfront trail should connect all waterfront parks and be open to the public throughout the year, recognizing that some portions may have seasonal access.

The waterfront trail should be safe and comfortable year-round.

- The trail should be protected from adverse winds during the colder months. A landscaped buffer between the waterfront trail and adjacent roads should be designed to provide wind protection in winter.
- Routing of the trail should be evaluated based on its feasibility to be used year-round by pedestrians, cyclists and others including seniors and the physically challenged. Attention should be paid to making those parts of the trails most exposed to wind and icy conditions safe and comfortable.
- Walking surfaces should be dry, non-slippery, even, and heat-absorbent (for example, asphalt). Minimum salting should be used for snow and ice removal. Adequate drainage facilities should be incorporated into trail design.
- Washrooms and food concessions should be provided at appropriate nodal points along the trail and should be open to the public year-round where possible.
- The level of illumination and quality of lighting along the trail should ensure the safety of users during the winter and should enhance each park's natural environment.

The waterfront trail should be a visually interesting and attractive green corridor; views and vistas to the lake should be maintained and enhanced.

- Trail and park walkway designs should preserve and enhance vistas and views of the lake and should reflect the intensity of use and the character of each park.

Frequent year-round public transit service should be provided to all waterfront parks.

- Transit stops and shelters should be provided at park entrances and be designed to be comfortable in winter -- protected from winds,

have dry floors and be heated where possible. This is particularly important to those who are unable to drive.

Automobile parking along the water's edge should be sensitive to all.

- Parking should continue to be limited along the water's edge. Necessary parking such as small 'pod lots' should be provided at the periphery, well-screened from parkland areas to accommodate seniors and the physically challenged who cannot walk long distances and who enjoy viewing the water's edge from within a parked car. The design of these pod lots should be sensitive to all park users.

1.2 POLICY 2: Improve the Comfort Levels of Outdoor Space Along the Waterfront

Climate Conditions Along the Waterfront

The climate of the Toronto Region is affected by the Great Lakes which tend to raise average winter temperatures by about 3° C and reduce summer temperatures by about 1.5°C compared with temperatures in the hinterland. The influence of the lakes causes constant fluctuation of freezing and thawing periods during the winter months, often making weather unpredictable and the use of outdoor spaces sporadic.

The prevailing mean daily wind direction for the Toronto Region shifts according to the season. In winter, prevailing winds from the westerly direction are experienced 50% of the time. During the spring, 46% of the time they come from the west and 42% of the time they come from the northeast. In summer, 61% of the time prevailing winds come from the southwest while in autumn almost 50% of the time they come from the west/northwest.

During January, maximum temperatures along the shoreline are similar to those of the surface of the lake. April is characterized by considerably warmer temperatures inland and cooler water temperatures. Daytime off-lake breezes are common; in the spring these breezes can moderate air temperature as far as 10 miles inland. However, their effects are most noticeable within two or three miles from the shoreline. In July, the mean daily air temperature and the lake surface water temperature are very similar. During this time, off-lake breezes occur during the day and off-land breezes during the night. In October, the maximum temperatures inland are again similar to lake temperatures. Essentially, the presence of the lake makes coastal areas warmer than those in the interior at this time of year.

Human Comfort

The relationship between microclimate and use of the outdoor environment during the colder periods of the year has been the subject of several studies. Scandinavian studies (Gehl and Bjerkto, 1988; R. Erskine and Culjat, 1980) have demonstrated that on days when the temperature is around 10° C and wind is absent, people feel comfortable without heavy clothing and will utilize outdoor open space.

A recent research study (Findlay, Environment Canada, 1989) concluded that Toronto's microclimate could be moderated through wind sheltering to provide approximately 56 additional days of outdoor use throughout the year. This represents an increase in year-round parks' use of almost 50% over the existing base season of eighteen weeks.

As ambient temperatures in March, April and May are just below the human comfort level (10° C), and sunlight and day length are increasing, wind-sheltering and sun capture techniques could provide an increase in local temperature thereby encouraging park use. In October and November, the temperatures are still in the outdoor comfort range but the wet, windy weather need to be addressed to achieve comfortable levels.

The distribution of added days per month that human comfort criteria for outdoor park use would be met, following wind screening implementation, is presented in the graph on page 16.

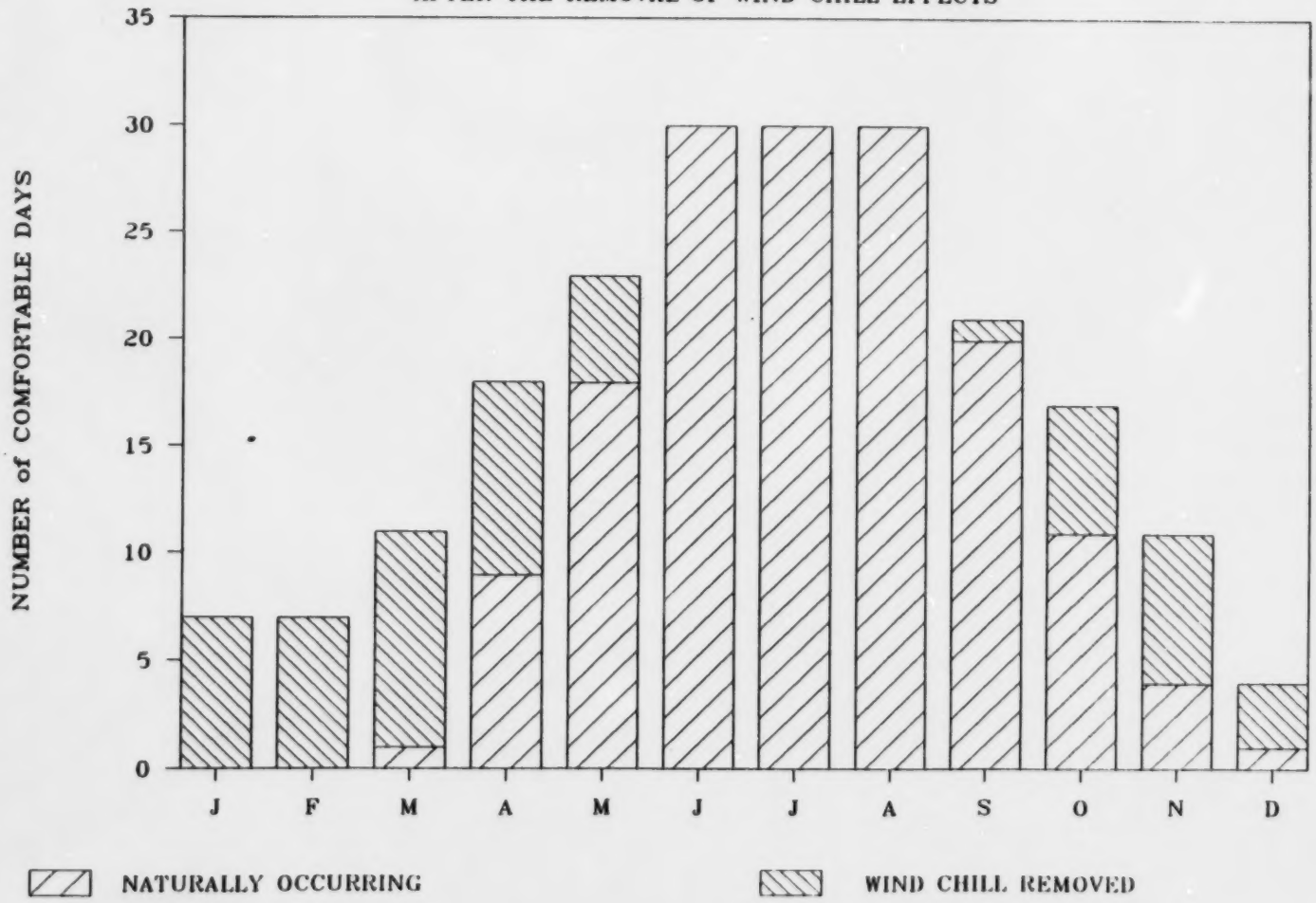
Wind comfort standards for all publicly accessible promenades, open spaces and waterfront parks should be developed taking into account the specific microclimate conditions and extreme windiness of the waterfront.

- In general, ground level wind speeds in walking and skating areas along the waterfront should not exceed the 12 km/h comfort criteria more than 10% of the time between 7 am and 6 pm. In sitting areas, the wind speeds should not exceed a 7 km/h limit more than 10 % of the time between 7 am and 6 pm (see Table A).

  Downtown Toronto standards stipulate that the wind speed level along sidewalks must not exceed 11 km/h more than 10% of the time between 7 am and 6 pm. In outdoor public places designed for sitting and standing, wind speed must not exceed 7 km/h more than 10% of the time. When ambient wind speeds already exceed these standards, new buildings should be designed to reduce them. (*Sun, Wind and Comfort, Study of Open Space and Sidewalks in Four Downtown Areas*, Institute of Urban and Regional Development, College of Environmental Design, University of California, 1984.)

YEAR-ROUND USABILITY OF PARKS

AFTER THE REMOVAL OF WIND CHILL EFFECTS



Lower temperatures along the waterfront and the resulting wind chill allow acceptable wind speeds on the waterfront to be less than those suggested for the Toronto Central Area.

- When implemented, the standards should define those areas most appropriate for outdoor uses in the colder months. For example, sitting areas and walkways should be located within areas which can be protected from winter winds. Sitting areas along the water's edge which are exposed to strong winds should be sheltered in a manner that maintains views.

Sun pockets should be created in appropriate locations in waterfront parks to encourage outdoor use in the off-season.

- Sunpockets are a site-specific tool which can ensure solar access within parks. The semi-enclosed seating areas have direct sunshine access and are protected from winds. Such "winter garden rooms" can be created using evergreen hedges, topiary-type landscaping or other screening methods. Floor surfaces should be solar absorptive (dark coloured pavement) or even heated.

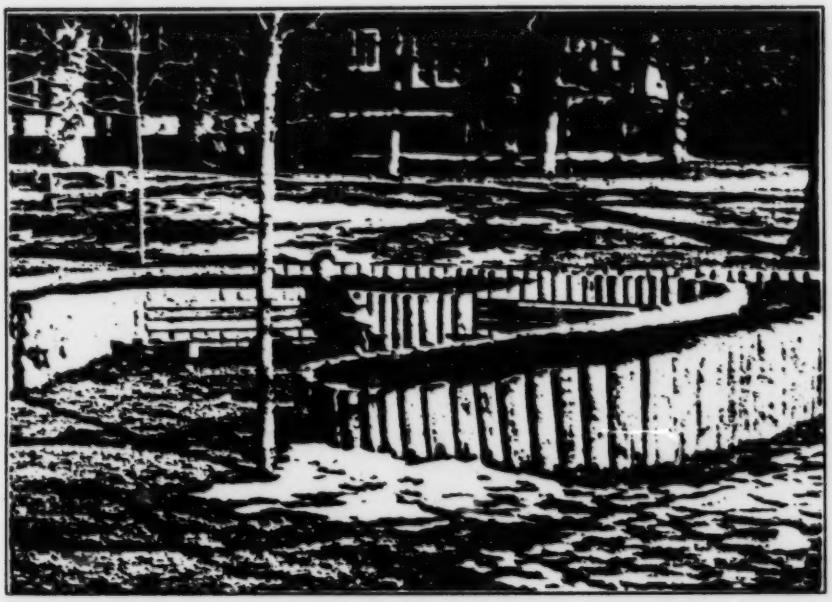
- Sunpockets at the water's edge are particularly desirable, as they can be oriented in such a way as to provide vistas and views to the open water while blocking undesirable winds.

Built Environment

A recent study which analyzed the effects of development on the microclimates and use of four downtown parks in San Francisco concluded that localized wind conditions and the availability of direct solar radiation play a critical role in determining the thermal comfort of people in public open space, and their decision whether or not to use it. When the combination of wind and air temperature makes sitting in the shade uncomfortable, people do not use that part of the park. (Bosselmann, 1984.)

Comfort criteria for windiness have been developed for Toronto's Central Area (G. Baird, *On Buildings Downtown*, City of Toronto, 1974). These criteria, involving wind speeds, frequency of wind occurrence and outdoor ambient temperature (above 10° C), are used to determine the types of activities which would be comfortable in outdoor spaces given certain conditions.

A recent study undertaken for the City of Toronto examined and analyzed the effects of buildings on wind conditions at street level and the combined effects of sun and wind conditions on pedestrian comfort. It also recommended procedures and standards for preserving sunlight access to Central Area sidewalks, parks and open spaces, and confirmed that sunlight



Modest sunpocket at High Park

and wind conditions play a critical role in determining whether or not the outdoor space will be used — particularly in spring and fall. While the study provided specific recommendations for protecting sunlight access to streets and open spaces, it suggested that further studies are necessary to establish performance standards that will protect pedestrians from possible wind

Only those benches exposed to sun are used at Trinity Square in early March

Table A: Comfort Criteria for Windiness

Units: Beaufort Number (see chart below for definiton of Beaufort numbers) Temperatures > 10°C

Activity	Areas Applicable	Relative Comfort			
		Perceptible	Tolerable	Unpleasant	Dangerous
1. Walking fast	Sidewalks	5	6	7	8
2. Strolling, skating	Parks, entrances skating rinks	4	5	6	8
3. Standing, sitting — short exposure	Parks, plaza areas	3	4	5	8
4. Standing, sitting — long exposure	Outdoor restaurants, bandshells, theatres	2	3	4	8
Representative criteria for acceptability			<1 occn./week	<1 occn./month	<1 occn./year

At lower temperatures relative comfort level might be expected to be reduced by one Beaufort number for every 20°C reduction in temperature.

Extracts from Beaufort Scale

Force	Description	Wind Speeds* (miles/hour) Mean	Limits	Specifications
2	Light breeze Gentle breeze	5 (4)	4-7 (3-6)	*Wind felt on faces*; leaves rustle
3	Gentle breeze	10 (8)	8-12 (6-10)	Leaves and small twigs in constant motion; wind extends light flag
4	Moderate breeze	15 (12)	12-18 (10-15)	Raises dust and loose paper; small branches are moved
5	Fresh breeze	21 (17)	19-24 (15-20)	Small trees in leaf begin to sway
6	Strong breeze	28 (22)	25-31 (19-25)	Large branches in motion whistling heard in telephone wires; *umbrellas used with difficulty*
7	Moderate gale	35 (28)	32-39 (25-31)	Whole trees in motion; *inconvenience felt when walking against wind*
8	Gale	42 (34)	39-46 (31-38)	Breaks twigs off trees; *generally impedes progress*

*Wind speed at reference height of 30 feet; nearer the ground at 6 feet say the speeds may be about 80% of the mean speeds indicated (figures shown in brackets).

velocities induced by future development. (*Sun, Wind and Pedestrian Comfort*, P. Bosselmann and E. Arens, Centre for Environmental Design Research, University of California, and K. Dunker and R. Wright, Centre for Landscape Architecture Research, University of Toronto, 1991.)

Microclimate improvements in built forms such as courtyards and wind-screening buildings have been demonstrated by several Scandinavian projects. Residential courtyard user studies at the new satellite community of Skarpnack, near Stockholm, Sweden (Erskin, Chuljat Arch.) and in Malminokartano, Helsinki, Finland, have demonstrated that courtyard use may be extended by about six weeks, most notably in spring, by applying the 10°C comfort criteria. This microclimate improvement was achieved by applying urban design guidelines for each residential block — building heights are gradually increased from two stories at the southern edge of the courtyard to six storeys at the northern edge to screen out prevailing cold winds while allowing for maximum solar penetration.

Recently, the courtyard principle was used in several design proposals submitted to the Design Workshop for the Bathurst/Spadina Neighbourhood, organized by the City of Toronto Housing Department in 1989. The concept of a prototypical courtyard was derived by applying micro-planning principles for wind protection and solar access to the residential park (EKO Consultants, 1990).

San Francisco is another example of a city which has recently developed and adopted solar access and wind comfort standards for modifying building

Residential courtyards in Skarpnack, Sweden, Ralph Erskin, Architect

form, height, densities and setbacks to protect open space pedestrian environments from overshadowing and wind tunnelling effects generated by development.

In response to continuous erosion of the usable public open space downtown and on the waterfront as a result of increased overshadowing and wind from massive development, the residents of San Francisco initiated referendum "Proposition K", approved by voters in June 1984. Proposition K dictates that sun access must be protected within all public parks and open spaces under the jurisdiction of the Parks and Recreation Department, from one hour after sunrise to one hour before sunset throughout the year. Following the referendum, several amendments regarding sun access to sidewalks and other open spaces have also been adopted.

Guidelines for controlling windiness in public open spaces in the Central Area in Toronto were developed in 1974 but have not been adopted as part of the Official Plan policies. Developers are currently encouraged to assess their project's impact on the microclimate of the surrounding areas, but seldom are required to change their design since the proposal is tested for wind effects in the final stage of the planning approvals process.

There are numerous local examples of increased wind velocity in parks and open spaces caused by nearby office towers. For example, it is likely that the proposed Railway Lands development will increase wind velocity in parks and open spaces along Harbourfront. Further studies would be necessary to determine the feasibility for design modification. It is also likely that beneficial lake breezes which cool inland areas during the hot summer months will be blocked by many of the proposed waterfront developments. Rather, future developments should not aggravate the already harsh microclimate along the waterfront, but should attempt to ameliorate it.

Testing of several landscape configurations for wind reduction in Maple Leaf Quay Park (City of Toronto Parks and Recreation Department, 1989) indicated that dense evergreen screening and the application of courtyard design could produce almost calm conditions within a park even when wind speeds exceed the 10 km/h limit. However, although this would be desirable in winter, it could make the park almost unusable in the summer. Therefore, an alternative landscape design consisting of a single row of high canopy evergreens at the water's edge was tested; the penetration of summer winds from the lake was facilitated and protection from winter winds was achieved.

Planning control measures should include wind impact studies to be conducted prior to project approvals. New buildings should not have an adverse impact on existing wind velocities along urban streets and in waterfront parks and open spaces.

- Prior to the approval of any new waterfront development proposals, wind studies should be conducted to demonstrate that there will be no detrimental change in wind patterns, velocities and turbulence at the sites in question. Wind testing of proposed projects should be conducted by the proponents early in the approvals process and be taken into account in planning and design decisions.

Where wind speeds already exceed acceptable comfort levels, proposed developments should aim to reduce these speeds.

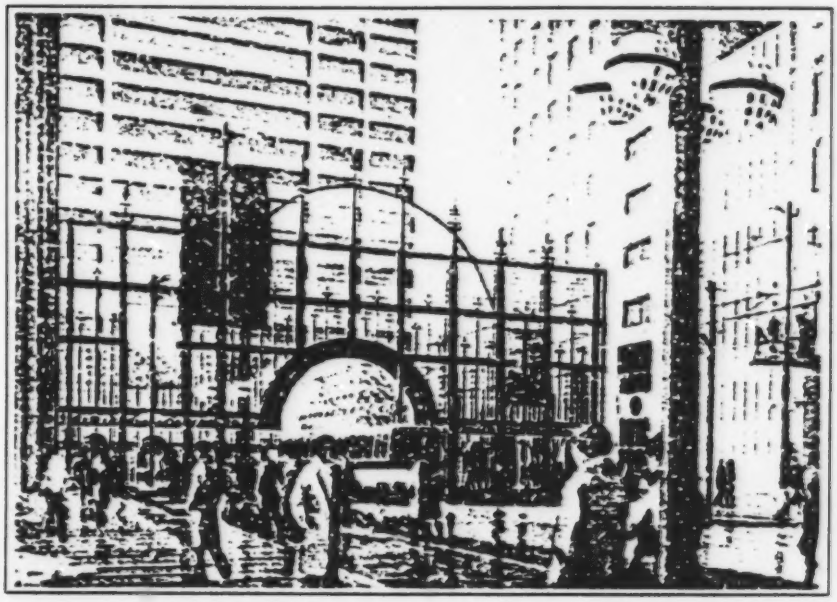
- The location of new promenades, open spaces or park sites within development or redevelopment projects should be selected to minimize wind effects.
- As it is neither possible nor desirable to screen all areas of the waterfront from adverse winds, each site should be assessed on its need and potential for modification based on the existing microclimate, present and future uses, and adjacent developments.

There are two basic methods of reducing wind velocity within a specific site — use of man-made structures such as berms, walls and screens and use of planting. Berms require sloping ground and therefore consume more space than some man-made screens. Berms can also be combined with trees and would be appropriate in areas where screening from traffic and winds is desirable.

Walls and windgates should also be considered for wind protection at park entrances and along roads. Windgates could be made of transparent metal screens, similar to those that have been proposed to protect walking areas along Buffalo's main street (Moriyama Arch.). Combined with vines and other plantings they could become attractive sculptural elements and park landmarks.

Close planting of trees and shrubs also provides effective year-round vegetation windscreening. The sheltering effect varies with the porosity of the plantings — very dense evergreens achieve a strong reduction (about 80%) in wind speed and force. However, this can only be sustained for a short distance (about 5 tree heights) due to the return flow of deflected air to the ground. Less dense planting reduces the sheltering effect and increases the effective range.

Sunlight standards should be adopted by municipalities and as part of the planning approvals process. Sun access should be maximized wherever possible for year-round use of waterfront parks and open spaces, especially those which may be affected by adjacent development.



A windgate in Buffalo (Moriyama Architects)

- Surveys of both existing and proposed parks and open space sites which would be affected by future (re)development should be conducted, to determine the need for site-specific guidelines for building location, height and form to avoid overshadowing.

- Modifications to built form should be required if proposed projects would create extensive overshadowing. Municipalities should develop their capacity for sun angle charting and related evaluation of development proposals.

- The small scale of some parks in relation to the surrounding high density buildings provides little opportunity for unobstructed sun access. Standards should ensure maximum sun access to parks during peak use. For residential parks, standards should reflect their more consistent use throughout the day.

  For example, for parks intensely used during the early afternoon (lunch time), sun access to all sitting areas of the park should be ensured from 11:30 am.(D.S.T.) to 2:30 pm (D.S.T.) from fall to spring equinox. For parks used predominantly by local residents, sun access to all areas used for sitting and gardening and to children's playgrounds should be ensured from 10 am (D.S.T.) to 4 pm (D.S.T.) from fall to spring equinox.

- Wherever possible a minimum of 6 hours of sunlight daily from fall to spring equinox should be provided to major walkways such as promenades and boardwalks.

Standards should also consider requirements necessary to foster a healthy and mature natural environment. For example, implementation of green corridors will not be feasible if adequate sunlight for tree growth is not available. Natural areas such as existing woodlands, wetlands and marshes and those that are intended for naturalization and reforestation should have adequate sun access, preferably from one-and-a-half hours after sunrise to one-and-a-half hours before sunset (D.S.T.) from fall to spring equinox.

Gardens and horticulturally significant areas within waterfront parks should also have sun access preferably from one-and-a half hours after sunrise to one-and-a-half hours before sunset (D.S.T.) from fall to spring equinox.

1.3 POLICY 3: Provide Facilities to Accommodate Desired Winter Waterfront Activities

Available information on summer use of the waterfront indicates that walking, sitting and enjoyment of nature are the most popular activities. (MTRCA Waterfront Park Use Survey, 1985; survey for *Strategy for the Future*, City of Scarborough, 1988; *Survey of Downtown Office Workers*, City of Toronto, 1989; *High Park User Study*, City of Toronto, 1987.) Limited research into winter recreational needs, conducted by the City of Toronto Parks and Recreation Department, indicates that these activities, in addition to others such as skating, remain the most popular outdoor activities in the colder months. Recent studies undertaken for the Royal Commission confirm these uses and indicate that recreational, entertainment or cultural waterfront activities currently deliver the most benefits to local residents.

General demographics and composition of summer waterfront park users was determined by surveys conducted by the MTRCA on four regional parks -- Marie Curtis Park, Humber Bay Park, Ashbridge's Bay Park and Bluffer's Park -- in 1985 and by the City of Scarborough in 1988. (*MTRCA Waterfront Park Use Survey*, 1985 and *Strategy for the Future*, City of Scarborough, 1988.)

The MTRCA survey revealed that the majority of visitors to the parks are 26-40 years old, with Ashbridge's Bay and Bluffer's Park having the highest percentage of users in this age group. Humber Bay Park has the highest proportion of users in the 41-65 age range. The proportion of seniors using the parks range from only 2 to 7%; Ashbridge's Bay has the highest proportion followed by Bluffers's Park. The survey also indicated that both sexes use the parks equally in the summer season, except for High Park, which is used more by men. The survey indicated that visitors to Marie Curtis and Bluffer's Parks are often families or groups of three or more. Visitors to Ashbridge's Bay and Humber Bay Park are frequently couples or

singles. The proportion of children (ages 5-11) using the parks is slightly larger than that of seniors, comprising 7 to 10% of all visitors. For the four parks, the majority of visitors are white-collar workers (45%), followed by blue-collar workers (30%) and retired visitors (14%).

Despite the fact that in Metro seniors are demographically the fastest growing group, the MTRCA survey shows that they constitute a very small proportion of park users. A recent study on seniors' mobility in winter (*Seniors Mobility in Winter*, EKO Consultants 1990) indicates that they want and need to be outdoors year-round. Today's seniors live longer, are healthier and enjoy a wide range of recreational interests, from aerobics to bird watching. Walking is considered the most desirable recreational activity for their health and well-being and for many it is their only activity. Yet they are deprived of adequate opportunities for full-filling this basic need in the winter because many of our outdoor spaces are neither designed nor maintained for safe winter use.

Municipalities should co-ordinate the undertaking of research studies concentrating on the off-season recreational needs of residents. Special emphasis should be placed on the needs of the elderly, women's groups (single women, working women; single mothers; elderly women), children, teenagers, families and ethnic communities.

- Requests for more playgrounds and the general absence of younger children in regional parks may indicate that children's facilities and programmes are inadequate. If parks are to attract more children throughout the year, the structure of playgrounds should be reconsidered. In the absence of snow, which provides an exciting medium for play in winter, nature and the variety of experiences that it offers year-round could be used in the development of playgrounds and programmes.
- Children's areas should be protected from winds and should have well-drained surfaces. They should be safe and accessible, providing more opportunities for interesting and educational interaction with each park's natural environment.

In addition to recreational needs, distance to destinations was also discovered to be a factor contributing to park use. (*MTRCA Waterfront Park Use Survey*, 1985; *Strategy for the Future*, City of Scarborough, 1988). Findings are again based upon summer use, but the same general trend likely occurs in winter. The added inconvenience of cold, snow and ice in winter travel tends to restrict park use to local residents to an even greater extent than in summer. However, further studies of behaviourial patterns in winter by various user groups is required to determine more accurately the desired length of travel time and the length of visit duration in parks.

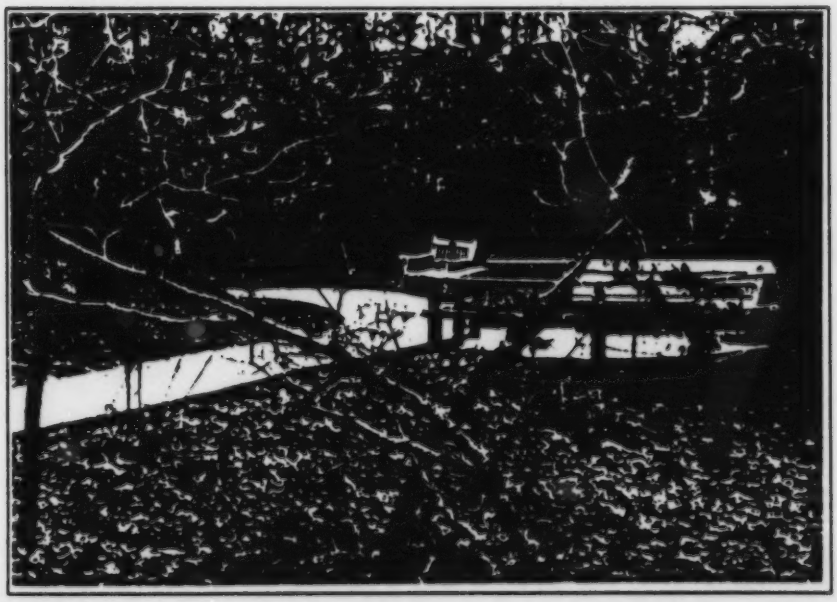
Shelters offering protection from wind, rain and snow, yet allowing for enjoyment of views of the lake, would encourage prolonged visits to the waterfront as the weather gets cooler. Strategic locations for shelters would include places where visitors linger or sit, such as look-out points and along walkways.

Shelters should be provided at strategic locations along the waterfront. They could be designed in combination with change rooms, food concessions and washrooms.

- Shelters could be placed in natural areas and along the shoreline, where observation of wildlife or fishing involves long, stationary waiting. Design should permit unobstructed views from the shelter while still providing adequate protection from the elements.

Design of park facilities should be diverse, safe and accessible to all.

- Where appropriate, park facilities including walkways, shelters and protected sitting areas should be accessible to children, seniors and the physically challenged and should be maintained for safe winter use.
- Existing facilities such as classic summer gazebos could be modified to serve as more substantial shelters during colder months. They could be adapted for winter use with temporary enclosures such as transparent or glass panels where appropriate. They could even have



In Pedmont Park, Atlanta, seats and viewing platforms are provided within restored woodlands.

stoves and wood piles to warm up those who use parks for prolonged visits.

In general, there is a lack of seating in parks across Metro Toronto. Seating is often provided according to funding available for park development — waterfront parks are not an exception.

Seating capacity standards adopted in New York and San Francisco for downtown parks correlate the number of seats to the size of each park. One linear foot of seating space is provided per linear foot of the park's periphery, or per 30 square feet of park space. These standards are not entirely appropriate for use given Metro Toronto's climate, however similar seating standards would be beneficial.

To foster year-round use of parks and open spaces, it is necessary to develop and administer seating capacity standards and guidelines. These standards should be related to Metro Toronto's microclimate as well as to current and intended park activities and uses.

- Seating standards for year-round parks should be reviewed or developed based on Metro's climate conditions and current and intended park activities. There is a lack of adequate seating in most of the waterfront parks and open spaces.

Waterfront park and open space seats and sitting areas should also be designed for comfortable use throughout as much of the year as possible.

- Seats should be easy to maintain, and design should give consideration to children, seniors and the physically challenged. Much existing seating is unusable in winter -- concrete benches and steps are too cold for sitting, and seats located in shade and exposed to wind or covered with snow are used reluctantly.
- Sitting areas are desirable along walkways and throughout parks, in areas where microclimate conditions are the most favourable. Screening from adverse winds and maximum solar access would ensure added winter use.
- Sitting areas should be protected from adverse winds and exposed to maximum solar radiation in winter. (In summer, these areas should be shaded from intense sunshine.) They could be sheltered with evergreens or dense deciduous plantings.
- The ground surface of such areas should be dry and non-slippery. Heated areas would also be desirable in performance areas where people sit for a few hours. Paving with heat-absorbent materials or use of waste heat from adjacent buildings are two ways to raise ground surface temperatures.

People promenading along Harbourfront in March

Where appropriate, especially where sun access is limited during peak use, consideration should be given to movable seating.

- Movable chairs and benches allow users to maximize the benefits of sun and shade conditions.

Movable chairs in Luxemburg Park, Paris

- Flexible seating arrangements provide opportunities for both privacy and social interaction. (Paris, New York, London and Stockholm provide movable seats in many of their parks, some of which have become park trademarks.)

Vandalism and theft are often reasons given for not providing movable chairs. However, this is contrary to the experience of the Metropolitan Museum in New York which provides 200 movable chairs along its front steps, and leaves them out 24 hours a day, seven days a week. It was found that the replacement of stolen chairs cost less than paying for their storage each night (W. Whyte, *The Social Life of Small Urban Spaces*, 1980).

1.4 POLICY 4: Increase Opportunities for Contact with Nature

The primary natural attraction of the waterfront is the lake itself and its changing moods throughout the seasons. Ice and wind are two natural forces which provide design opportunities for creating interesting seasonal visual sculptural elements. Many successful parks also have distinct natural features — perhaps an exceptional wildlife reserve, a spectacular view or a beautiful wild flower garden.

The landscape design of waterfront parks for year-round use should recognize the diversity and enhance appropriate natural environmental features.

- Sometimes the magnificent view of summer can be very disappointing in winter. Also, views of snow-covered landscapes can be breath-taking in the winter and be non-existent in the warmer months. The development of vistas and views should take into consideration seasonal weather, ambient light and colour. Care should be taken to ensure that structures such as windgates and windscreens do not impair views.

Create or enhance additional year-round diversity of waterfront parks and open spaces, sensitive to natural environmental features.

- The creation of historic gardens could evoke a sense of the history, personality and character of specific waterfront areas. Examples of historic gardens include the George Washington Garden at Mount Vernon, recreated to eighteen-century simplicity; a Shakespeare Garden in Central Park, New York, revived in 1989 and containing almost all plants mentioned in his plays; and St. James Garden in Toronto, re-creating the gardens of the 19th century Town of York.
- Fragrant and tactile gardens could provide special opportunities for enjoyment of nature year-round by those with impaired vision or lim-

ited mobility. Only one waterfront site, Rosetta McClain Gardens in Scarborough, currently offers this opportunity.

- Parks should be evaluated for their potential to support marshes and wetlands. In parks such as Ashbridges Bay, Humber Bay and High Park, the recreation of marshes and wetlands should be re-investigated.

  For example, partial re-creation of marshes at the south boundary of Grenadier Pond in High Park would not only improve the park's water quality and increase the number of natural species, but would re-instate the historic linkage of High Park with the Toronto shoreline.

- The re-design of Humber Bay Park could be explored. Located in the Old Humber Bay Village, it fails to convey its historic context and the character of this thriving waterfront community from the last century.

- Marshes in Ashbridge's Bay Park could be partially reclaimed, linking it to its past when Sarah Ashbridge's homestead was surrounded by the most extensive marshland of Toronto's shoreline.

- Added planting of evergreens, deciduous trees, and spring and fall shrubs and flowers would add colour and interest to the landscape year-round.

Ducks in High Park are popular with all age groups

- Re-creation of gardens and parklands specifically designed to be attractive and comfortable for visits outside the summer season, should be explored.

  They could provide opportunities for unique experiences of nature along the waterfront using native flowers, shrubs and trees to create wild spring flower gardens (lilies, orchids, trillium), gardens with spring-blooming shrubs (dogwood, service berry, choke berry, wild cherry) and fall and winter gardens (collection and display of trees and shrubs which have special colours and textures of leaves, bark and berries). Warm and protected outdoor "garden rooms" could be created by hedges of juniper, yews, boxwood and mountain laurel.

- The possibility of using lake water to create fountains, cascades, ponds and channels which could be artificially frozen to create ice sculptures, ice fountains, ice and light shows, skating and hockey areas should also be explored.

- The low sun angle and long shadows in winter present opportunities to exploit the intricacies of designing gates, trellises, sculptures and plantings and to create imaginative winter landscapes and enhance park attractiveness.

- Lighting, ice and the kinetic energy of wind can also be combined to create intricate seasonal sculptures.

Consideration should be given to enhancing natural environmental areas and off-season passive activities within waterfront parks.

Seasonal nature experiences along the waterfront could include:

- observing birds and butterflies along their migratory flight paths in spring and fall;

- observing winter animal tracks in the snow; observing and feeding winter waterfowl;

- viewing the frozen lake and sculptured icy waves and storms in winter;

- appreciating trees and shrubs in the winter (interesting bark, branch structure and berries which cling all winter long);

- appreciating the seasonal experiences of silence and the smell of melting snow in the winter, the changing colours in the fall and warm spring breezes.

Existing and future recreational and sports facilities along the waterfront should be reviewed regarding their potential for year-round use.

- To capitalize on investments and increase park use, where possible recreational facilities should be built for use year-round. For example, tennis courts could be used for tennis in summer and for skating in winter; swimming pools could be convertible: open for summer, enclosed in winter; paved lots may be used for parking in winter but for tennis or shuffleboard in summer.

- Accommodation of seasonal sports activities which require large playing fields, such as soccer or baseball are not dependent on the waterfront and are seasonally under-utilised. The need to locate such facilities in waterfront parks should be revisited.

Increase overall awareness of and regard for nature through educational centres and programs.

- Special winter outdoor educational programs for children should be developed. These could include games, nature hikes or explorative tours, bird watching and animal tracking.

- Nature interpretation centres, open year-round, should be provided in regional parks where natural areas, woodlands, marshes and wetlands constitute a significant proportion of parkland. Nature trails should include sheltered areas for observation and descriptions of natural species, habitats and geological formations.

1.5 POLICY 5: Create a Safe Environment for All Users

The presence of people ensures safety within public areas. This is an important realization especially during the colder seasons when there is a decline in the number of park users and the length of daylight is shortened.

In designing safe and comfortable waterfront parks for use throughout the colder months, consideration should be given to the current decrease in people and its effect on safety. Park planning should include public consultation.

- Events drawing large crowds (such as open air theatre and concerts) and facilities such as vendors and restaurants, could strengthen current programming and increase park usage during the colder months.

- Sensitive lighting and parks surveillance is suggested.

- Concerned groups such as the Metro Action Committee on Public Violence against Women and Children (METRAC) should be consulted in decisions regarding lighting and plantings to increase park safety. Increasing their involvement will also give them a deeper understanding of park safety and encourage added year-round use.

Routing of the waterfront trail and park pathways should have regard for adverse wind and ice conditions and the feasibility of their amelioration to reduce hazards and enhance year-round safety.

- Darkness and windy, icy, slippery conditions increase the risk of injury to pedestrians and cyclists. Where possible, pathways should be non-slippery and be kept dry, well-lit and maintained throughout the year.
- Snow and ice removal of pedestrian routes should be done, with minimum salting. Adequate drainage and snow storage should be accommodated.

1.6 POLICY 6: Provide Opportunities for Winter Events and Programming

In order to increase seasonal waterfront tourism, appropriate agencies should offer added opportunities to enjoy its unique setting, culture, history and existing entertainment facilities and events.

Facilitate the development of community-based annual outdoor / indoor winter events in parks which are usable year-round, accessible, attractive, comfortable and safe. In the colder months, encourage alternatives to traditional activities which rely heavily on snow or ice.

- Activities which do not rely on snow and ice may include theatrical performances, carnivals and concerts, bonfires, and those which exploit the natural attractions of the off-season.

Promote events which attract large numbers of people to parks in winter.

- Outdoor theatrical performances, concerts and sport events in fall, spring and winter should be promoted by the municipalities in order to increase visitors to waterfront parks and increase safety in the off-season.

Pleasure skating should be accommodated along the waterfront.

- Selected areas should provide artificial ice surfaces along the waterfront. Preferred locations for pleasure skating are flat and shallow natural or man-made areas which could be frozen in colder weather to safely accommodate users of all ages. The York Quay skating rink at Harbourfront is an excellent example of a site well-used for recreational and educational water activities in the summer and skating and other uses in the winter.

Minimize the impact of events and tourist attractions on adjacent residential neighbourhoods.

- The needs of nearby communities should be given consideration and local residents should be encouraged to participate in the planning of major recreational events particularly when addressing potential traffic, parking and other problems.

The current focus of waterfront parks and open spaces is strongly oriented to summer recreational activities such as walking, boating and picnicking. If recreational use throughout the year is to be enhanced, policies should be revised and amended operational practices implemented.

This section reviews existing municipal policies regarding year-round use of waterfront parks and open spaces. Official plan and specific waterfront policies of Etobicoke, Toronto, Scarborough and Metropolitan Toronto are discussed as they relate to enhancing park microclimate, accessibility and facilities during the colder months.

Criteria which may be used by each municipality to evaluate the potential for increasing the year-round use of individual parks are presented in Appendix 1. These include factors such as incorporation of the waterfront trail, access by public transit, availability of parking, the quality of the park's natural environment, and year-round recreational and auxiliary facilities. A municipal parks inventory of existing and proposed facilities and suggested improvements for year-round use is listed in Appendix 2. In re-evaluating, revising and implementing planning policy, it is important to recognise that some parks lend themselves more to enhanced year round use than others.

2.1 City of Etobicoke

2.1.1 General Policies

The existing general policies contained in the Etobicoke Official Plan relevant to waterfront development mainly address preserving and creating views to the lake and improving public access. These policies refer to, but do not emphasize the year-round use of waterfront parks. There are no specific policies or guidelines for increasing and enhancing the comfort level of parks and open spaces along the waterfront, and existing guidelines for urban public open spaces and streets are not applicable to waterfront areas because of their unique microclimate conditions and uses.

The Motel Strip Secondary Plan Waterfront Public Amenity Scheme provides an additional set of guidelines for development of a specific area of the waterfront between Park Lawn Road and Palace Pier Court. However, it does not adequately emphasize the need for year-round use of the subject lands.

The City of Etobicoke is in the process of developing a waterfront plan. In addition, the City has been involved in Metro's waterfront trail planning

process and has proposed a route through its portion of waterfront. The local Parks and Recreation Department is in the process of initiating its parks master plan process which will address these and other issues.

Policies on year-round recreational uses of waterfront parks and their compatibility with the natural environment need to be strengthened. More specific policies concerning the year-round enjoyment of natural areas and parklands along the waterfront should include standards for sun access, wind speed reduction and seating facilities, and guidelines for recreational uses compatible with the natural environment. The proposed waterfront plan should incorporate those policies and guidelines which would support and increase year-round use, enhancing the character of Etobicoke's waterfront.

2.1.2 Existing Parks Facilities for Winter Use

There are twelve waterfront parks under Etobicoke's municipal jurisdiction, most of which occupy less than 2 hectares each and serve the adjacent residential communities (see Appendix 2). Two of these parks have facilities (skating rink and community centre) open to the public in winter, and two parks have hard-surface walkways usable in winter. Most parks are accessible primarily by car, with parking along the street. Two parks are directly accessible by public transit.

Within Etobicoke, there are three regional waterfront parks: Marie Curtis Park, Colonel Sam Smith Park and Humber Bay Park. Colonel Samuel Smith Park is still under development; the other two parks offer only hard-surface walking and bicycle paths as facilities for winter use. Of these three parks, only Marie Curtis Park will be directly served by public transit, the other two relying on access by private car.

2.2 City of Toronto

2.2.1 General Policies

The City of Toronto Official Plan Part I contains the policies pertaining to development in the Central Waterfront. The policies which promote the year-round use of parks and open spaces can be summarized as follows:

- The significant environmental resources and amenities of the Metro waterfront are to be enhanced through the application of microclimate principles to proposed developments. This includes building orientation, windscreening by landscaping and protection of sun access in winter. For the Harbour Square Lands, further development is to be permitted if it does not aggravate adverse microclimate conditions by increasing wind velocity and reducing sun access.

- The recreational needs of local communities are to be accommodated by providing parks and facilities which can be used year-round.
- The increased year-round use of the Exhibition District, Toronto Island District and Outdoor Harbour Headlands is to be encouraged by improved public transit access.
- Public access is to be increased and improved by providing continuous, separate pedestrian and bicycle routes which are comfortable, convenient and enjoyable year-round. Where feasible, they should be separated from traffic. These routes are to be located preferably along the mainland shoreline, the Don Valley, the Outdoor Harbour Headland, and the Toronto Island District.

The City of Toronto Parks and Recreation Department has also adopted internal design guidelines for Central Area parks and open spaces based upon microclimate principles and user needs (*The Potential for Year-round Use of Parks in the Central Area*, EKO Consultants, 1989). In the survey of downtown office workers conducted during the study, lack of seating was indicated as the major problem of the Central Area parks because of their intense but short peak period use.

It is important to re-examine the benefits of seating standards to improve human comfort. In addition, there are currently no specific standards or criteria enforced to assess the potential impact of built form on microclimate along the water's edge.

This could be rectified by developing and adopting policies and standards specific to the waterfront using methodology similar to that used in *Sun, Wind and Pedestrian Comfort A Study of Toronto's Central Area* (P. Bosselmann and E. Arens, Centre for Environmental Design Research, University of California at Berkeley and K. Dunker and R. Wright, Centre for Landscape Architecture Research, University of Toronto, 1990).

The year-round use of buildings and facilities in the Garrison Common lands (Ontario Place/ Exhibition Place/ Fort York/ HMCS York) is promoted through policies for improvement of public transit access and development of local and regional, cultural and recreational facilities. The recently released Royal Commission report, *Preliminary Master Plan for Garrison Common* incorporates strategies to increase the year-round use of existing and proposed facilities and the usability of outdoor spaces.

2.2.2 Existing Parks Facilities for Winter Use

Within the City of Toronto waterfront area, there are thirteen regional and local parks (see Appendix 2). The three parks within the Western Beaches area have continuous hard-surface walkways but lack public, winterized

washrooms and food concessions. They are not directly served by public transit but are provided with parking areas which are used for viewing the lake in winter. High Park, although it does not have direct lake frontage, is considered a part of the waterfront park system. It offers some facilities for winter use and is highly accessible by public transit and by car. Ward's Island and Algonquin Island Parks are accessible year-round by ferry and have boardwalks and food concessions for winter use; however washroom facilities are not open to the public during the winter.

Within the central waterfront, all regional and local parks have walkways linked to the Martin Goodman Trail. Washrooms and food facilities in adjacent commercial buildings are accessible to the public year-round. The Eastern Beaches sector contains three parks linked by a boardwalk. These parks are well-used throughout the year. They are within walking distance to public transit and are accessible by car. The adjacent Queen Street commercial strip offers a variety of food facilities year-round.

Within the Central Waterfront Area, there are five regional parks.

- Marilyn Bell Park is accessible by pedestrians and cyclists (Martin Goodman Trail) but is not directly served by public transit (10 to 15 minute walk from the nearest bus stop). Parking along the water is used to view the lake in winter.
- Coronation Park , including Battery Park and the Gore, is also connected to the Martin Goodman Trail. It is located adjacent to Lake Shore Boulevard and is therefore directly served by public transit. The park is open year-round but offers no special facilities in the winter.
- The Toronto Island Park operates in winter; however it is not directly accessible by ferry and facilities such as washrooms or food concessions are not open to the public.
- Tommy Thompson Park is accessible by foot, bicycle and limited public transit and offers no other facilities for winter use.
- Ashbridge's Bay Park is also served by bicycle and pedestrian paths (Martin Goodman Trail), and has a boardwalk, restaurant and washrooms available for winter use.

2.3 City of Scarborough

The Scarborough Official Plan was recently amended to include policies respecting their waterfront (May 1991). The adopted policies favour public use of the waterfront in a primarily natural setting. The policies generally

endorse the Commission's principles that the waterfront should be clean, green, usable, diverse, open, accessible, connected, safe and affordable.

2.3.1 General Policies

- The environmental well-being of the waterfront is to be protected and enhanced.
- Development adjacent to the waterfront should be of such scale, height, density and access so as not to adversely affect the waterfront areas.
- Improvements to waterfront access should respect existing natural and social communities. A waterfront trail should enhance access to the waterfront and link Scarborough to adjacent municipalities. Where possible, educational information on the natural environment of the Scarborough waterfront is to be provided along the trail.
- Views to and from the bluffs and lakefront are to be preserved and enhanced.
- These general policies will be supplemented by more detailed studies which may lead to additional policies.

The newly adopted waterfront policies support the goal of greening and naturalizing the waterfront, but could be supplemented by including consideration to enhance winter use.

The development of parks in Scarborough is guided by strategies outlined in the 1988 master plan for the Recreation, Parks and Cultural Department, *Strategy for the Future*. The plan acknowledges the need for the increased winter use of parks and suggests strategies for increasing opportunities for winter hiking, walking, skiing, winter programming and winter festivals.

2.3.2 Existing Parks Facilities for Winter Use

Along the Scarborough waterfront, there are nine regional waterfront parks, one of which has not yet been developed (East Point Park). Three of these parks — Rosetta McClain Gardens, Scarborough Heights Park and Guildwood Park — are directly accessible by public transit. Four have limited or no parking facilities and visitors must park along adjacent residential streets. With the exception of Bluffer's Park and Rosetta McClain Gardens, there are no hard-surfaced walkways provided within parks which can be used in winter. Only two parks (Bluffer's Park and Guildwood Park) have facilities such as washrooms and restaurants which are open to the public year-round. (See Appendix 2.)

2.4 Metropolitan Toronto

2.4.1 General Policies

The responsibility for planning and managing the waterfront was delegated by the Province of Ontario to the MTRCA in 1970. Metro Toronto approves and funds plans and projects prepared by the MTRCA based on waterfront development guidelines in the Metropolitan Toronto Official Plan. The general objectives support the development of a Metropolitan Park system which could contain a wide range of recreational facilities and areas to accommodate year-round activities. More specifically, the Official Plan policies pertaining to waterfront development note that approval of development proposals should be guided by the need to accommodate a "wide variety of active and passive recreational experiences throughout the year". (*The Official Plan for the Urban Structure: Metropolitan Toronto.*)

The *Ten Year Concept Plan of Major Recreation Facilities*, developed in 1983 by the Metro Parks and Property Department and approved by Metro Council, provides general strategies for "extending the use of Metro parks over longer periods of the year for a wider population base". These strategies include:

- The development of nodes which could integrate recreational facilities and parks amenities for year-round use.
- Increasing accessibility to fishing by children, seniors and the physically disabled through provision of piers and boardwalks, and by decking of existing groynes.
- Grooming of cross-country ski trails and winterization of washrooms.
- Development of a waterfront trail network to accommodate walking, jogging and bicycling.
- Research into the feasibility of a conservatory, greenhouse and botanical garden complex and creation of gardens at Rosetta McLain and Guildwood Parks.

Metro's support for a continuous waterfront trail will provide an opportunity for increased year-round use of regional waterfront parks.

The Metropolitan Toronto Planning Department is currently working on a revised waterfront plan scheduled for completion in 1991. It is assumed that the plan will address waterfront usability and accessibility in the winter season.

2.4.2 Existing Parks Facilities for Winter Use

Review of the facilities provided in Metro's regional waterfront parks are given in Appendix 2. Although many of the 17 parks are used year-round, only a few have washrooms and food facilities open to the public in winter. While almost all of the Metropolitan parks within the City of Toronto, with the exception of the Toronto Island Park, are connected to the Martin Goodman Trail, Metro parks in Etobicoke and Scarborough are currently accessible primarily by private cars or boats.

One of the major factors which hinders the increased use of regional waterfront parks is their overall lack of access by public transit. Only four regional waterfront parks have a public transit stop directly at their entrance. In most cases, a 10 to 15 minute walk from the transit stop is required to reach each park. Two parks presently under development or proposed, Colonel Sam Smith Park and East Point Park, will be served by public transit and will be connected to the waterfront trail and the Highland Creek trail extension, respectively.

2.5 Conclusion

Current local and regional planning policies and operational practices do not adequately accommodate winter use of the waterfront. Policies are not strong enough to ensure that outdoor conditions along the waterfront are amenable to winter use of parks, promenades and open spaces.

Specific policies regarding the impact of future developments on the microclimate of adjacent parks and open spaces are necessary. Municipalities should develop standards for sun access and wind comfort levels for their respective waterfront areas similar to those developed for the City of Toronto Central Area (*Sun, Wind, and Pedestrian Comfort*, 1991). In addition, urban design policies should be expanded to include guidelines for the improvements of existing uncomfortable wind conditions in waterfront parks, including windscreening, design and location of walkways and sheltered sitting areas.

Present waterfront design favours the summer season and only a few park facilities are usable year-round. Improvements to access and facilities for winter use should be based on the interests and needs of both local and regional users -determined through surveys if necessary. Future parks, open spaces and promenades should also be designed with appropriate considerations given to colder months.

Not all waterfront parks have the potential to be used year-round. Those parks with significant potential for enhanced year-round use should be identified based on their ability to conform to the six policies and the evaluation criteria provided in Appendix 1.

3. CASE STUDY: YEAR-ROUND ENHANCEMENT OF HUMBER BAY PARKS EAST AND WEST

Of the waterfront parks within Metropolitan Toronto, some lend themselves more readily than others to enhanced year-round use. In order to help identify those with the best potential, an evaluation of each waterfront park — including Humber Bay Parks East and West — is provided in Appendix 1 using a detailed list of criteria developed in accordance with the general policies in Chapter 1.

It is recognized that the criteria are somewhat subjective and require further detailed refinement to reflect the needs and characteristics of each waterfront park. A more thorough understanding of people's recreational needs and of the type of facilities and activities which are most desirable for the year-round use of parks, is also recommended to further substantiate the study's findings and recommendations.

This chapter details the results of applying the six policies to Humber Bay Parks East and West, as an example, and presents related costing information to winterize Humber Bay Park East based on a budget of $100,000. These parks were chosen because of their low-cost winterization potential and the diversity of uses and activities already provided.

Both parks are within walking distance of high density residential development within the City of Etobicoke. The proposed redevelopment of the Motel Strip to the east and industrial areas to the north, including residential and office/commercial uses, will likely increase park attendance year-round and may create demands for additional recreational facilities and activities.

COMMENTARY

Policy 1: Provide year-round access to parks

Existing conditions:

- There is a good local road access. The park's internal roads are built according to the Metro roads standards and are maintained during the winter seasons.
- A TTC bus bay is provided within Humber Bay Park East, however, a bus shelter is not provided at the bus stop. There is no TTC stop to accommodate Humber Bay Park West. Street parking is not allowed along Lakeshore Boulevard West. Both parks have an abundance of internal parking totalling, 407 spaces.

- Regional access is provided by GO Transit, but the GO station is several blocks away. There is a proposal to relocate the GO station to the east which would improve the regional transit accessibility of both parks.

Proposed Improvements:

- A TTC stop to accommodate Humber Bay Park West, and a shelter at both TTC bus bays should be provided to increase comfort while waiting for the bus during colder seasons.
- Coniferous planting along roadways would reduce the visual impact of extensive paved surfaces on the quality of park experience and would provide wind screening. Care should be taken to minimize disruption of view to the lake. Walkways should be separated from roadways wherever possible.
- Better screening of parking areas with landscaping using mixed coniferous and deciduous planting is desirable to increase the quality of parks' natural experience year-round. Parking lots connected to pedestrian access walkways would also enhance usability, accessibility and connectedness.

Policy 2: Improve the comfort levels of outdoor space along the waterfront

Existing conditions:

- The large size of both parks, totalling approximately 45 hectares, offers opportunities for the application of large scale wind protection measures, the expansion of naturalized areas and the introduction of additional winter activities and facilities. Both parks are well-used in the summer months and therefore have attendance which could be attracted to use the parks year-round if comfort levels were increased and adequate facilities provided at minimal cost to make the surroundings more inviting.
- Full sun access is provided throughout the parks. Exposure to cold prevailing winds in spring and fall is a detriment to extended year-round use. The shoreline, with views of Lake Ontario, is the most desirable area for sitting and walking and is especially affected by winds and ice in the colder months.

Proposed Improvements:

- Adoption of wind comfort standards for the waterfront parks should be undertaken by the regional an/ or local municipality. User studies

should be conducted to determine how far people are willing to walk to reach the park, including comfortable walking distances to public transit, and the types of facilities and activities which should be provided to encourage year-round use.

- Information regarding waterfront microclimate and wind conditions generally conclude that the entire shoreline with direct exposure to Lake Ontario is windy and cold and requires protection from the prevailing winds. Wind studies conducted for each park would help to determine the extent and the appropriate location and form of wind screening.
- In the absence of the suggested studies, shelter belts with coniferous and deciduous trees should be established along the entire south/east shoreline of both parks. Tall ornamental grasses along the beach strip, at the edge of forests could also be used to provide additional wind screening.
- Permanent shelters providing comfortable yet safe places for sitting and viewing should be provided at the existing lookout locations in both parks.

Policy 3: Provide facilities to accommodate desired winter waterfront activities

Waterfront Walkways

Existing conditions:

- In Humber Bay Park West the pedestrian path is not continuous. It begins at the entrance and ends at the Metro Police Marine Unit building, approximately half way into the park. A large portion of the walkway follows the road alignment.
- Humber Bay Park East has well-defined pedestrian walkways throughout the entire site. Most walkways are exposed to winds year-round with no shade in summer. There is currently no trail linking the parks to each other or to other parks along the waterfront.

Proposed improvements:

- The Metro waterfront trail will link both parks and provide safe and comfortable year-round pedestrian and bicycle paths. The trail should incorporate the parking lots, connect both parks via a bridge structure over Mimico Creek, and should be extended north along the banks of the creek.

- Bicycle rentals could be provided at the comfort station in Humber Bay Park East or at the Humber College Sailing School at Humber Bay Park West.
- In Humber Bay Park West, pedestrian walkways should be expanded throughout the site and along the shoreline to facilitate the viewing of the lake. These walkways should be separated from the roads and designed to provide maximum contact with nature and views to the lake.
- Pedestrian walkways in both parks should be protected from adverse wind velocities by coniferous and deciduous planting with high canopies to ensure safety and to maintain vistas to the lake. Walkways along the south side of Lakeshore Boulevard near the park entrances should be enhanced by appropriate landscaping which would define the gateways to the parks.
- All major walkways and bicycle paths should be maintained year-round.

Year-Round Sitting Areas

Existing Conditions:

Seating in Humber Bay Parks East and West is inadequate and poorly spaced along walkways. Standard picnic seats are used.

Proposed Improvements:

- The appropriate type and placement of seats should be determined based on user needs . Seating standards for year-round use should be developed by the area municipality based on region's microclimate and current and intended park uses. The special needs of visitors with regard to sitting and walking throughout the year should be explored.
- Subject to further study, it is suggested that seating be increased in both parks, specifically in Humber Bay Park East which has higher attendance.
- In Humber Bay Park East movable seats should be provided around the pond area near year-round concession and washroom facilities. Additional seating should be provided in outdoor suntraps created by land forms and vegetation along existing waterways and ponds which would become skating areas in winter.
- A gazebo type shelter along the pedestrian path adjacent to the canal could be used by skaters as a change/rest area.

- Additional seating and suntraps should also be provided along the banks of Mimico Creek and in the vicinity of natural areas where wintering birds, etc. can be observed.
- All seats should be made of material with good drainage to dry out quickly and should include those designed to meet the needs of children, seniors and the physically challenged.

Washrooms

Existing conditions:

- Each park has one winterized handicapped accessible washroom open during winter. Washrooms are not visible from main pedestrian or vehicular paths.

Proposed improvements:

- Facilities which are available on a year-round basis in both parks should be noted at the parks' entrances. Washrooms should be clearly marked and easily accessible to persons including children, seniors and the physically challenged.

Food Concessions

Existing conditions:

- Presently there are no permanent food concessions open to the public in either side of the park. Private sailing clubs in Humber Bay West have restaurant facilities which are available to members only. Portable food concessions are provided to park users on occassional sunny days.

Proposed improvements:

- Food concessions are beneficial if enhanced park use is desired year-round.
- Secondary areas for food concessions could be at park entrances to serve those who visit the grounds during their lunch hour and have limited amounts of time to enjoy the park surroundings.
- More portable food concessions could also provide users with the opportunity for a cup of hot chocolate or a refreshing drink while continuing along walkways, ponds and skating canals in Humber Bay Park East and along the shoreline in Humber Bay Park West.
- A winter garden — a conservatory and a cafe/restaurant — could be provided in Humber Bay Park East. Added to the existing building

(comfort station), it could provide a display space for plants and flowers grown in Metro's nurseries.

Other Facilities

Existing conditions:

- There is a lack of shelters for protection from rain, wind or snow. This is especially hard on handicapped or elderly visitors whose speed and paths of movement are restricted.
- There is also a lack of childrens' playgrounds, and year-round facilities and programmes in both parks.

Proposed improvements:

- Cover the existing steel canopy structure at the south side of the comfort station building in Humber Bay Park East to provide shelter from rain.
- Provide children's playgrounds in Humber Bay Parks East and West which are related to year-round nature interpretation.
- Examine the possibility of extending park programmes into the off-season.

Policy 4: Increase opportunities for contact with nature

Existing conditions:

- The two parks are very different. Humber Bay Park West is developed primarily to accommodate boating facilities and attract boaters and sailors year-round. Humber Bay Park East is developed as a nature park with opportunities for fishing, nature observation and picnicking and is well-used by casual park visitors during summer season but not in winter.
- With the exception of the exposed shoreline along Lake Ontario, most of the Humber Bay Park West area is leased to private sailing clubs and is therefore inaccessible. The division between the public and private lands is clearly marked by a visible chain link fence. Exposed winter boat storage has been identified as an eyesore and a deterrent to the aesthetic quality of the park.
- Both parks are developed on landfill with minimum grade undulation, making them visually uninteresting and exposed to winds. Vegetation is immature and predominantly deciduous.

- There is a lack of coniferous trees and shrubs which results in a bleak winter landscape and the absence of shade in summer. The use of native shrubs and flower species is evident in Humber Bay Park East where a naturalization process has been initiated by the Metro Parks Department
- Both parks have extensive shoreline which affords magnificent views of the lake and downtown Toronto. The beach areas are used for sunning during the summer but are windy and exposed during the remainder of the year.

Proposed Improvements:

- Reforestation of the parks — particularly along the shorelines with predominantly coniferous trees and shrubs — would provide a more attractive natural environment, improve the microclimate and support wildlife. Increased vegetation could also be used to further screen current boat-storage operations.
- The planting of spring and fall shrubs and flowers which add colour and provide food for wildlife and birds would enhance park attractiveness in winter.
- The expansion of wetlands on both sides of the fishing pier in Humber Bay Park East would enhance the natural environment of the park and support the re-establishment of the ecological systems.

Policy 5: Create a safe environment for all users

Existing conditions:

- Roadways are cleared of snow in winter however pedestrian walkways are not maintained.
- The reduced number of park visitors and lack of food concessions and other facilities during the winter season increase the risk of assault.
- Inadequate pedestrian lighting adds to an unsafe environment. The park entrance provides no user information.

Proposed Improvements:

- The surface of new pedestrian walkways should be of heat absorbing material to reduce maintenance requirements. This is especially desirable in suntrap/sitting areas.

- Food concessions should be open year-round. The possibility of allowing the public to use food facilities in the Mimico Cruising Club and/or the Etobicoke Yacht Club during the winter season should be explored.
- Design principles for increased safety should be applied when reforesting and landscaping the parks, keeping in mind that those measures should not detract from the natural quality of the park.
- Lighting should be sensitive to those areas under a naturalization program including nature trails.
- A description of each park should be provided at the entrances, including information on park size, walking distances to the shoreline and other points of interests (preferably in minutes of walking time), available facilities and activities for winter use recognizing seasonal limitations.

Policy 6: Provide opportunities for winter events and programming

Existing conditions:

- Presently there are no winter events or programming in either of the parks. Winter use of Humber Bay Park East includes informal activities, primarily the viewing of wintering birds and some fishing during late spring and early fall.
- Humber Bay Park West is more active throughout the year. Sailing school and private clubs are operative year-round and the use of the public boat launch extends into late fall.

Proposed improvements:

- No major winter events are visualized for Humber Bay Park West. The development of winter programs in Humber Bay Park East depends on what is to be provided within the Motel Strip. If there is concentrated development along the Motel Strip proceeds as proposed, considerable commercial uses could develop along the water's edge.
- Winter events and programmes in Humber Bay Park East may then also be initiated by the local community in the future.

The cost of improving the comfort of waterfront parks varies according to the degree of enhancement required. Funding availability is also a major consideration when determining which facilities to upgrade. As part of the

case study, an imaginary yet realistic budget of $100,000 determined feasible by MTRCA, was allocated to the consultant.

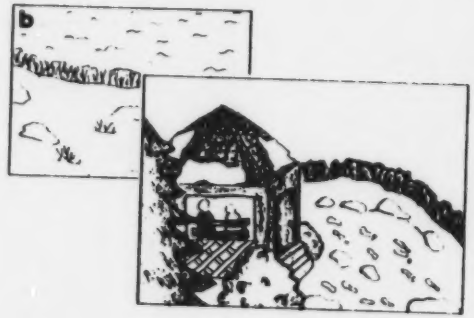
Costing of the following proposed facilities and improvements was done using information provided by the conservation authority and is based on the conceptual design for both parks developed by the members of working group (see Map 1).

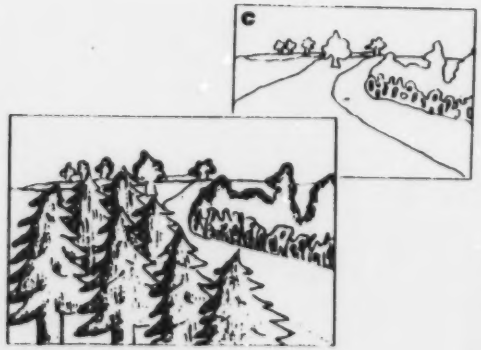
All figures are approximate and are provided to demonstrate the types of improvements which can be achieved within limited budgets. It is assumed that background microclimate studies have been done as changes such as the planting of shelter belts and the placement of other screening facilities should be undertaken only after the wind effects of proposed landscape improvements have been determined.

The following elements are the most essential in improving the comfort and enhancing use of Humber Bay Park East in the colder months:

• Extension of the existing park pathway (limestone gravel)	
800 linear metres at $60/m	$48,000
• Sheltered gazebo	5,000
• Calliper trees	
200 of 500 suggested trees at $275/tree	$55,000
TOTAL	$108,000

Added suggestions to help attract park users include addition of the proposed waterfront trail in both parks, a pedestrian connection over Mimico Creek, extension of the existing park pathway, a shelter belt of trees in Humber Bay Park West, and the freezing of shallow ponds for use as skating areas in the winter.





LEGEND

- EXISTING PARK PATHWAY
- PROPOSED PARK PATHWAY
- PROPOSED WATERFRONT TRAIL
- EXISTING VEGETATION
- PROPOSED VEGETATION
- BOAT LAUNCH — EXISTING FACILITIES
- BIKE RENTAL — PROPOSED FACILITIES

WINTER WATERFRONT CASE STUDY: PROPOSED IMPROVEMENTS FOR HUMBER BAY PARK

The Work Group examined the Metropolitan Toronto waterfront area and decided that a number of waterfront nodes within the region should be selected as potential major sites for possible large-scale winter events and festivals.

It was agreed that Harbourfront and the Garrison Common lands (Exhibition Place/Ontario Place/Fort York/HMCS York) retain the potential to attract visitors on a regional, national and international scale. On a regional scale, it was determined that recreational areas with the most potential to attract visitors were the Motel Strip/Humber Bay Park area in Etobicoke, the Toronto Island Park in Toronto and the Guild Inn/Guildwood Park area in Scarborough.

As a result of these conclusions, this chapter briefly discusses each site and its potential for enhanced year-round use at the appropriate levels, and then presents a general overview of opportunities for enhancing outdoor recreational activities during the year.

Harbourfront

Harbourfront provides the most extensive year-round programming and entertainment at the waterfront. The new mandate of the Harbourfront Foundation is to operate, organize and provide a stage for Toronto's artistic, cultural and community groups. The majority of events held during the off-season are held indoors, although winter programs organized around the skating rink are very popular. If future public and private open spaces are designed for year-round use, there could be opportunities for expanding indoor events to the outdoors. For example, an outdoor performance could be staged during lunch hour to promote current dance or theatrical performances at the Queen's Quay Complex.

Garrison Common (Exhibition Place/Ontario Place/Fort York/HMCS York)

There are major facilities which presently provide or have the potential to provide entertainment and events on regional, national and international levels. Outdoor spaces are primarily used during summer, and the opportunity for year-round utilization has been ignored in their design and in programming. Winter climatic conditions within these lands are harsh and open spaces would require major microclimate modification as well as programming compatible to the environment. *The Preliminary Master Plan for Garrison Common* examines opportunities for year-round use.

The Toronto Island Park

The Toronto Island Park is currently used year-round. The Toronto Islands are major regional public parklands accommodating millions of visitors, primarily during the summer season. With a few key modifications, this park could become increasingly comfortable, attractive and accessible in the colder seasons. Crossing of the lake in winter could be made a special experience and present location of the Ferry Terminal should be examined with regard to its potential for increased year-round operations. Its relocation may be warranted if microclimate conditions could not be improved to make the approach to the present building more hospitable in winter.

The natural environment of the Island already has a good base of vegetation including evergreen trees planted during the last five years. Additional planting would be beneficial to screen some open spaces which are currently exposed to strong winds. Overall, development would require relatively little investment because of the facilities already existing.

Guild Inn / Guildwood Park

The Guild Inn and Guildwood Park in Scaborough are the only public facilities along the waterfront, outside the central Toronto sector, which are used year-round. The hotel/conference complex is currently privately operated. The park, including an extensive collection of architectural artifacts, is operated by Metro Toronto and is open to the public year-round. This park is especially appreciated in winter when the sculpture garden can be viewed against the serene background of snow and evergreens.

The various parties concerned with the development of the Guild Inn are currently undergoing further negotiations regarding the future of this site. A significant expansion of the built form would decrease the park's natural serenity and expanse of open space, the site's most valuable assets. Redevelopment should be sensitive to the existing culture, history, and low-scale of the current site and should focus on elements which would increase public use of the site.

Motel Strip/Humber Bay Park

The proposal currently includes development of extensive retail areas, creation of wetlands and associated educational and recreational facilities. The proposed community park and performance centre is intended to accommodate major events and festivals.

The above five sites are considered the most suitable for development as major year-round tourist attractions. In the future, as development along the waterfront evolves, there may be other park sites with similar potential.

These sites should be identified by the appropriate municipalities. Metropolitan Toronto and the MTRCA, which own and operate all regional parks within the metropolitan boundaries, should undertake the assessment of waterfront parks in conjunction with local municipalities and designate those which are best suited to become year-round sites of major tourist events.

The extent to which a regional or a local park could become a setting for a major festival or a large scale event will depend on the support and acceptance by its local community. In most cases, the adjacent community will be affected by increase in traffic, parking and noise if adequate public transit, pedestrian and bicycle paths are not available.

Such assessment should be based on evaluative criteria including:

- the quality of the park's natural environment and plans for its future role
- its accessibility by public transit and its connections to the waterfront trail
- the impact of proposed events on adjacent residential communities

Unpredictable climate changes and sudden temperature increases have made traditional outdoor winter events difficult to stage in Metropolitan Toronto. Organizers cannot rely on having adequate snow and freezing temperatures at the time of an event. In recent years, Toronto has sponsored winter festivals which were unsuccessful because they were planned for cold, snowy conditions which did not materialize. Therefore, focus should be placed on events and activities which do not depend on ice and snow. For example, lighting displays, tree decorating, bonfires, and winter-adapted summer sports such as camping, marathons, triathalons, horse back riding and canoeing. These activities could form the basis of successful events and festivals.

Quebec City's annual winter carnival has been taking place for over 35 years. The 11-day event held every February includes outdoor activities such as skating along 3.8 kilometres of the St. Charles River, a perilous canoe race in the half-frozen St. Lawrence River, a snow sculpture contest and horse back riding on ice. Many indoor events are also held, including a Beach Party, an Exotic Hairstyling and Make-up Competition, a Fashion Show featuring Canadian designers and a Casino Night.

Ottawa also hosts an annual winter event in February, the 10-day Winterlude Festival. Adapted summer activities featured range from snow golfing to a triathalon comprised of skating, skiing and running. Other activities include a 160 km Canadian Ski Marathon which receives over 1000 entries annually.

Other North American cities also host events during the winter season. For example, Easton, Maryland, hosts a Waterfowl Festival in mid-November which celebrates waterfowl conservation. The International Eelpout Festival in Walker, Minnesota, held in mid-February, began as a spoof on all the north woods fishing contests and as a celebration of surviving the "worst" part of the winter, but has since gained tremendous popularity and draws thousands of fishermen. During the month of October in Font du Lac, Wisconsin, the "Spectacle of the Geese" celebrates the migration of Canada geese to the marshes with sunrise and sunset viewing tours and fall colour paddlewheel boat excursions. The success of these events does not depend upon snowfall or very cold temperatures, and similar activities may be well-suited to Toronto's climate. Whatever the weather, the joy of winter can still be celebrated.

The increased comfort level of parks would boost the potential for extending the programming of outdoor performances and introducing new forms. Improving outdoor environments by ameliorating microclimate conditions and designing for year-round use would enhance opportunities for staging events and attracting tourists in the shoulder seasons.

To date, programming of special outdoor events and festivals at the waterfront has focused primarily upon the summer season. Noon hour or early afternoon concerts and fashion shows could be organized in waterfront parks throughout the year. During the winter, special waterfront events are often held indoors in selected locations such as Harbourfront, Ontario Place and Exhibition Place.

Skating remains the most popular traditional winter activity. The rink at Harbourfront is one of its main winter attractions. The lake itself is not safe for skating, but the traditional "skating on the lake" could be simulated by providing artificial ice surfaces located at its edge. Large scale skating events could become a part of winter carnivals. North York uses skating as one of the major attractions of its annual winter festivals.

Although the emphasis of this report is on the year-round use of outdoor spaces, it should be noted that many events during cold seasons are held indoors. Winter is the season when the cultural life of the city is at its peak, and theatres, concert halls, restaurants and cafes are the most popular social places. However, if parks and open spaces could provide a new level of comfort, some of these activities could be brought outdoors. If Metro Toronto is to develop further as a tourist area during the colder months, it should make a greater attempt to promote outdoor winter entertainment opportunities on the waterfront as well as promoting the unique setting, culture and history of the waterfront.

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Appendix I *Proposed Criteria and Evaluation of Year round Use of Existing Waterfront Parks*

The following seven categories comprise what the working group deemed to be the basic elements which should ideally be made available to a local or regional park to ensure its success on a year-round basis, that is a park which is open during all seasons of the year.

For the purpose of this study, the following criteria based on these categories were used in evaluating the parks' overall usability/performance; the resulting scores are noted in the following charts:

• Public Transportation	divided into "local" and "regional" and indicates the park's accessibility to local public transit such as TTC, and/or GO Transit.
• Private Transportation	divided into "local" and "metropolitan" and indicates the park's accessibility to a local road network and/or a Metro road.
• Parking	divided into "on-street" and "internal" and indicates the amount of available parking which would not obstruct the water's edge or the view in relation to park size.
• Context	divided into "residential" and "office". The residential context indicates the park's accessibility to medium to high density residential dwellings and would suggest that the park would draw primarily from neighbourhood residential users. The office/commercial context signifies the park's proximity/accessibility to medium to high density development. A high score in this category would suggest a good potential draw form office workers.
• Water Exposure	divided into "lake" and "tributary" indicating the park's exposure to the shoreline and/or riverbank and the degrees of shelter provided.
• Walkways	divided into "hard surface" and "soft surface".
• Facilities	divided into "washrooms" and "concessions".

Appendix I *Proposed Criteria for Evaluation of Existing Waterfront Parks in Winter*

Public Transportation (10 points maximum)

- **Local**
  - 5 - immediate access
  - 3 - up to 2 blocks with easy direction
  - 1 - 4 blocks or more with easy directions
- **Regional**
  - 5 - immediate GO station access
  - 3 - GO station and 1 bus trip under 10 blocks
  - 0 - GO station and 1 bus trip over 15 blocks **or** no GO station and 2 local bus routes

Private Transportation (10 points maximum)

- **Local**
  - 5 - immediate access to clear local road network
  - 3 - immediate access to irregular local road network
  - 0 - no access to local road network
- **Metropolitan**
  - 5 - immediate access to Metro road
  - 0 - no access to Metro road within 10 blocks

Parking (10 points maximum)

- **On Street** 0 - 5 score as objectively as possible as to sufficient on street parking which does not obstruct the water's edge or view in relation to the park's size
- **Internal** 0 -5 score as objectively as possible as to sufficient internal parking which does not obstruct the water's edge or view in relation to the park's size

Context (10 points maximum)

- **Residential**
  - 5 - immediate access up to 2 blocks for medium to high density residential
  - 4 - immediate access up to 4 blocks for medium to high density residential **or** 2 blocks for low to medium density residential
  - 3 - access over 4 blocks to medium to high density residential **or** over 2 blocks for low to medium density residential
  - 2 - access over 6 blocks for any residential
  - 0 - no residential within 8 blocks
- **Office/ Commercial**
  - 5 - immediate access within 2 blocks of medium to high density development **or** 1 block for low density
  - 3 - access within 4 blocks of medium to high density development **or** 2 blocks for low density
  - 0 - neither high density within 6 blocks nor low density within 3

Proposed Criteria for Evaluation of Existing Waterfront Parks in Winter continued

Water Exposure (10 points maximum)

- **Lake**
  - 5 - shoreline frontage with some shoulder season shelter (natural or built)
  - 3 - shoreline frontage and no shelter
  - 0 - no frontage

- **Tributary**
  - 5 - riverbank frontage with some shoulder season shelter (natural or built)
  - 3 - riverbank frontage and no shelter
  - 0 - no frontage

Walkways/Bikeways (10 points maximum)

- **Hard Surface**
  - 5 - paving in convenient locations including the shoreline and in generous amounts
  - 3 - paving in limited locations and quantities (formal)
  - 0 - no paving

- **Soft Surface**
  - 5 - pathways in convenient locations including the shoreline and in generous amounts
  - 3 - pathways in limited locations and quantities (informal)
  - 0 - no pathways

Facilities (10 points maximum)

- **Washrooms**
  - 5 - winterized open for year-round use
  - 3 - open summer season only
  - 0 - none

- **Concessions** open to public
  - 5- open year-round with indoor seating
  - 4 - open year-round without indoor seating or open summer only with indoor seating
  - 3 - open summer and weekends in shoulder season only
  - 2 - open only in summer—not shoulder
  - 1 - private concession not publically accessible
  - 0 - no public or private concessions

Metropolitan Toronto

		Public Transportation		Private Transportation		Parking		Context		Water Exposure		Walkways / Bikeways		Facilities		Total 70 points maximum
Park	Size (ha)	Local	Regional	Local	Metro	Street	Internal	Residential	Office/Comm.	Lake	Tributary	Hard	Soft	Washrooms	Concessions	
Marie Curtis	25	5	5	5	5	5	5		0		5	3	3	3	0	44
Humber Bay West	26	4	3	5	5	0	5	5	5	5	5	3	3	3	1	52
Humber Bay East	19	5	3	5	5	0	5	4	5	5	5	3	5	5	0	55
Marilyn Bell	7	1	0	0	5	0	5	2	0	3	0	5	0	0	0	21
Coronation	11	3	0	0	5	0	5	4	3	5	0	5	0	0	0	30
Toronto Islands	230	5	3	0	0	0	0	2	0	5	0	5	5	3	0	28
Ashbridges Bay	35	5	5	0	5	0	5	3	0	5	0	5	5	0	0	38
Rosetta McClain	9	5	0	5	5	0	5	4	0	5	0	5	0	5	0	39
Scarborough Heights	10	3	0	5	5	3	5	4	0	5	0	3	0	0	0	33
Bluffer's	42	1	0	3	3	0	5	0	0	5	0	3	5	5	5	35
Cathedral Bluffs	9	1	0	3	3	3	0	4	0	3	0	0	3	0	0	20
Cudia	16	1	0	3	3	1	5	4	0	5	0	0	3	0	0	25
Sylvan	10	1	0	3	3	1	0	4	0	5	3	0	3	0	0	23
Guildwood	22	5	3	5	3	0	5	4	0	5	0	2	3	0	0	35
Rouge Beach	3.6	1	0	3	3	0	5	3	0	5	5	3	3	3	0	34

Etobicoke

Park	Size (ha)	Public Transportation		Private Transportation		Parking		Context		Water Exposure		Walkways / Bikeways		Facilities		Total 70 points maximum
		Local	Regional	Local	Metro	Street	Internal	Residential	Office/Comm.	Lake	Tributary	Hard	Soft	Washrooms	Concessions	
43rd St. Park	.95	5	5	3	5	3	0	5	0	0	5	3	0	0	0	34
38th St. Park	.17	0	0	3	1	5	2	5	0	5	0	0	0	0	0	21
Len Ford Park	.8	0	0	3	1	5	2	5	0	3	0	1	3	0	0	23
Long Branch Park	1.3	0	0	3	1	5	0	5	0	3	0	2	0	0	0	19
28th St. Park	.16	0	0	3	1	5	0	5	0	5	0	0	0	0	0	19
Birch Park	2.36	1	0	3	1	3	3	5	0	0	0	1	0	5	3	25
Rotary Park	2.8	1	1	3	2	1	4	4	0	5	0	2	0	3	0	26
Prince of Wales	2.0	2	2	4	2	2	4	5	0	3	0	0	0	5	3	32
Norris Crescent Park	.44	3	0	5	4	3	0	5	0	3	0	0	0	0	0	23
Amos Waites Park	.92	5	0	5	5	0	4	5	3	3	0	4	0	4	0	38
Superior Park	.48	3	0	5	4	2	0	5	3	5	0	5	0	0	0	32
Palace Pier Park	.71	0	0	1	0	1	0	5	0	0	3	0	0	0	0	10

Toronto

Park	Size (ha)	Public Transportation		Private Transportation		Parking		Context		Water Exposure		Walkways / Buildings		Facilities		Total 70 points maximum
		Local	Regional	Local	Metro	Street	Internal	Residential	Office/Comm.	Lake	Tributary	Hard	Soft	Washrooms	Concessions	
Western Beaches • Gzowski • Budapest • Lakeshore		3	0	5	0	0	5	2	0	5	0	3	0	2	0	25
High Park		5	4	5	0	4	5	5	3	0	5	5	0	5	5	51
Little Norway		5	0	5	0	3	0	4	2	4	0	5	0	2	0	30
Toronto Islands		2	0	0	0	0	0	3	0	5	0	5	0	4	0	19
Spadina Gardens		5	0	5	0	4	0	4	2	5	0	5	0	0	0	30
Harbour Square		5	4	5	0	4	0	5	5	5	0	5	0	2	0	40
Polson St.		0	0	5	0	5	0	0	0	5	0	5	0	0	0	20
Clarke Beach (Cherry Beach)		0	0	5	0	0	5	0	0	5	0	0	0	0	0	15
Eastern Beaches • Woodbine • Kew Gardens • Eastern Beach		3	0	5	5	4	5	4	3	5	0	5	0	4	4	47

Scarborough

Park	Size (ha)	Public Transportation		Private Transportation		Parking		Context		Water Exposure		Walkways / Bikeways		Facilities		Total 70 points maximum
		Local	Regional	Local	Metro	Street	Internal	Residential	Office/Comm.	Lake	Tributary	Hard	Soft	Washrooms	Concessions	
Crescentwood (Mostly Bluff)	1.49	3	0	4	3	2	0	4	0	1	0	0	0	0	0	17
Harrison Est.	2.56	5	2	5	5	4	0	4	2	1	0	0	0	0	0	28
South Marine (Mostly Bluff)	8.10	2	0	2	1	2	0	4	0	1	0	0	1	0	0	13
Grey Abbey (Mostly Ravine and Bluff)	8.91	3	1	3	2	3	0	4	0	1	1	0	1	0	0	19

Appendix II *Inventory of Existing and Proposed Park Facilities*

Table 1. City of Etobicoke: Inventory of Existing and Proposed Year-round Waterfront Park Facilities and Suggestions for Improvements

Park/Open Space	Area (ha)	Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Prince of Wales Park	2.00	• artificial skating rink		• sheltered sitting area • possible use of waste heat from Metro pumping station
Birch Park	2.36	• walkway		
Motel Strip Open Space	14.2		• wetlands, marsh • overlooking parking bays only • passive park setting, sitting areas • trail and interpretive centre (visitor services, trail guides, bike rental, interpretive displays, natural history) • Boardwalk Centre • Fishing Centre • Etobicoke Beach and Pavilion (year-round facilities: washrooms; terraces for sitting and skating) • amphitheatre • Commercial development	• shelter for viewing • facilities for seniors and handicapped in shoulder season; unusable in colder seasons unless screened and seats heated • boardwalk; wind screening of waterfront path • provide activities for winter use including skating in wind-screened area • wind screening of skating in winter

City of Etobicoke (Continued)

Park/Open Space	Area (ha)	Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Palace Pier Park	0.71		• pedestrian node connecting to Humber River, Lake Shore Blvd, etc.	• view of Humber River • green corridor to Humber Valley • sun pocket
Superior Park	0.92	• walkway • sitting area		• view of the lake • sheltered walkway and sitting area
Amos Waites park	0.92	• walkway • community centre • washrooms		• sheltered sitting area • outdoor pool could be converted to skating rink in colder weather
Norris Crescent Park	0.44			• garden • dry path and sheltered seating area
Rotary Park	2.85			• outdoor swimming pool/wading pool could be converted to skating rink in colder weather • washrooms
28th Street Park	0.16			• view of lake • sheltered sitting area
Long Branch Park	1.33	• walkway		• horticultural display for fall season as well • gazebo could be converted for year-round use • washrooms

City of Etobicoke (Continued)

Park/Open Space	Area (ha)	Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Lenford Park	0.80	• walkway		• view of lake • walkway • shelter wind screening
38th Street Park	0.17			• view of lake • sheltered sitting area • dry path
Total	26.42			

Table 2. City of Scarborough: Inventory of Existing and Proposed Year-round Waterfront Park Facilities and Suggestions for Improvements

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Crescentwood	1.49	• good view of the lake to the east • long walk for public transit • no parking • seating area		• access to the lake
Harrison Estate	2.56	• nicely wooded site • good public transit access from Kingston Road • parking available adjacent to the site	• intended to be more developed in the future	• potential for conversion of one of the houses on site for year-round public use e.g. washrooms, meeting place, etc. • year-round concession
South Marine Drive	8.10	• nice wooded area • mostly bluff • land locked site • long walking distance from public transit • used by local residents for walking and enjoyment of nature		• right-of-way at eastern end could be negotiated with developer to make the park accessible from the east.
Grey Abbey		• nice wooded site • long walk from public transit • used by local residents for walking along trails		• potential to be linked with waterfront trail; possible adverse environmental impact on existing forest if trail goes through • access to the lake
Total	12.15			

Table 3. City of Toronto: Inventory of Existing and Proposed Year-round Waterfront Park Facilities and Suggestions for Improvements

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Western Beaches • Gzowski Park • Budapest Park • Lakeshore Blvd. Park	62.75	• breakwall, ice formations and great views • extensive parking lots close to the lake • Martin Goodman Trail throughout the park • children's play equipment • Sunnyside Pavilion		• walkways; link to Martin Goodman Trail • added landscaping • wind and noise protection
High Park	399.0	• nature observation year-round; good views • significant frontage on Grenadier pond and other internal waterways • fishing in Grenadier Pond • bird-watching • easy public access (subway and streetcar); parking also available • nature trails • City greenhouses • winter sports • children's play facilities • zoo • restaurant • washrooms	Year-round use will be achieved through the implementation of the following objectives: - restoration of nature, accommodation of user needs - public participation to continue as a part of the planning process - recreational facilities compatible with the restoration goal - safety for all users	• re-creation of wetlands • improved link to the waterfront • washroooms and food concessions open year-round

City of Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Little Norway Park	5.2	• good views • benches along water • waterfront access - part of Harbourfront • children's playground • washrooms (not currently open in winter)		• washrooms open year-round
Toronto Islands	27.1	• excellent waterfront views of the city • natural areas; canals • access by Ferry • concrete or asphalt walkways; boardwalk • weather permitting, existing natural skating areas and cross-country skiing • children's play areas (wooden) • souvenir centre building (summer use only) • yacht club on Algonquin Island • washrooms open year round • island community of unique homes • Toronto Island Residents Association events • Toronto Island School (Montessorri School on Algonquin Island in clubhouse)		• nature observation trails or facilities • design Ferry Terminal departure and Island arrival points for year-round use • windscreening of sitting and lookout areas

City of Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Spadina Gardens	1.4	• view of the lake • walkway; part of water's edge trail; close to Martin Goodman Trail • good seating		• incorporate access to Martin Goodman Trail and waterfront trail • existing building could be adapted for washrooms, etc.
Harbour Square Park	5.6	• view of the lake • boardwalk	• design competition	• added landscaping • existing washrooms could be adapted for year-round use • food concession could be part of park redesign
Polson St. Park (Port Industrial Area)	0.36	• good city skyline views • hard surface accessible by car only • sitting area		• few people are aware of its existence; park use will also increase as the area becomes more developed • improved wind screened pedestrian access
Clarke Beach (Cherry Beach) (Port Industrial Area)	34.2	• good views of the Leslie Street Spit • significant natural vegetation • secluded area • good physical access to lake • parking lots and roadways make it easily accessible by car • bicycle path	• scheduled new washroom/concession	• improved public access; boardwalk • new washroom and concession should be adaptable for winter use • winterized seating facilities • proper lighting to ensure park safety

City of Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Eastern Beaches	90.34	• garden • park • Martin Goodman Trail • boardwalk • bicycle path • fitness trail		
• Woodbine Beach Park		• good lake access and some views • good road access and parking - no public transit • shelters • benches • children's playground • existing concession (Boardwalk Bistro) • existing winter washrooms		
• Kew Gardens Park		• oak forest • physical access to lake • close to public transit • historic house • seniors' club and lawn bowling • artificial ice rink • children's playground • concession facilities • close to commercial areas		

City of Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
• Eastern Beach Park		• scenic residential community • good lake views • good mature vegetation • good connections to open space in Scarborough • good street access for parking • some children's play facilities • Balmy Beach Club (on federal land) • close to commercial areas		
Total	625.95			

Table 4. Metropolitan Toronto: Inventory of the Existing and Proposed Year-Round Waterfront Parks and Suggestions Improvements

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Marie Curtis Park	25.0	• waterfowl habitat • bike/pedestrian path • link to Etobicoke Valley Park • washrooms not open in winter		• shelter for viewing waterfowl • wind screening • dry sitting area • winterized washrooms • concession year-round
Humber Bay Park West Humber Bay Park East	26.0 19.0	• waterfowl • wildflower planting • washroom; open year-round		• extended naturalized area • wind screening with heavy tree planting • heated shelters • dry pathways, bikeways
Marilyn Bell Park	7.3	• view of the lake and the Downtown • bicycle pedestrian pathway (Martin Goodman Trail)		• planting along Lakeshore Blvd • sheltered sitting area • allow more parking bays for viewing in winter • improve transit access
Coronation Park	10.8	• bicycle, pedestrian pathway (Martin Goodman Trail)		• sheltered sitting area • improve transit access • washrooms • concession

Metropolitan Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Toronto Island Park • Hanlan's Point • Centre Island • Ward's Island	230.4	• scenic views from the boardwalk • naturalized area • wildlife reserve • Island Ferries operate from the Ferry Terminal; winter service provided only to Ward's Island • pedestrian paths • boardwalk • washrooms (not open in winter) • petting zoo • private yacht clubs		• nature appreciation • landscaping for wind sheltering • warm up shelter • improve access to Island • redesign Ferry Terminal for year-round use • use of trackless train year-round • skating and cross-country skiing • winterize washrooms • operate food concessions year-round • more educational facilities, e.g. Natural Science School • operate centre for seniors in colder season
Tommy Thompson Park		• natural area • wetlands • wildlife habitat • temporary hard surface road used by cyclists and pedestrians		• trail development • links to Martin Goodman Trail • development of educational programs • boardsailing

Metropolitan Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Ashbridge's Bay Park	35.0	• waterfowl habitat • bicycle, pedestrian path (Martin Goodman Trail) • Woodbine Beach boardwalk • restaurant and washrooms open year-round		• winter maintenance of trail and path • shelter • wind sheltering with vegetation
Rosetta McClain Gardens	8.7	• formal gardens • public transit • parking • washrooms open in winter		• addition of a winter pavilion for scented and tactile garden • sheltered sitting area to view the lake
Scarborough Heights Park	9.8	• public transit • parking	• access to descend to the lake • pedestrian paths • picnic areas	• landscaped for winter use and sheltering from winds • sheltered walkway • shelters at look-out points • possible use of waste heat from the Filtration Plant for heating of pedestrian surface areas or for special effects (ice fountain)

Metropolitan Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Bluffer's Park	42.0	• bus stop at Brimley and Kingston Rd. • pedestrian pathways • washrooms (accessible by handicapped) • restaurant • Metro Police sub-station		• mini bus connection with the TTC stop and the water shuttle boats • parking to be provided outside of the park • improve access for pedestrians • shelter • concession • restaurant to be open to public year-round
Cathedral Bluffs Park	9.5	• excellent views of Lake • highest point along the bluffs • geological interest		• sheltered viewing area • promote naturalization and diversity of wildlife • spring wildflowers • wind screening with native evergreens • pedestrian path • difficult access by foot
Cudia Park	16.1	• excellent views of the lake • geological interest of bluffs • large wooded area • undeveloped	• footpaths • picnic areas • access to descend to the lake	• retain and enforce natural features of the park • combine bus stop, shelter, washroom and information at the entrance • develop pedestrian paths through the woodland with sheltered sitting areas at the lookout points at the lake's edge

Metropolitan Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Sylvan Park	10.0	• scenic view of the bluffs • geological interest of bluffs • woodland and rural setting	• access to descend to the lake • footpaths • picnic areas	• redesign existing scenic look-out and shelter from winds • combine bus stop, washroom and information at the entrance • develop pedestrian paths through the park with sheltered sitting areas
Guildwood Park	32.2	• old woodland and wildflower garden for spring viewing • park is on migratory path of the Monarch Butterfly and birds • public transit • parking • hotel restaurant and washrooms are open to public year-round • Guild Inn operated as a hotel and a conference centre year-round • The Guild Collection of architectural fragments is open to the public year-round	• expansion and redevelopment of the property • an orientation centre • art studio and demonstration spaces	• conduct survey on neighbourhoods needs and ideas • promote the existing park features; magic of winter scenery and old artifacts • exhibition area for art display • winter festivals • open air theatre

Metropolitan Toronto (Continued)

Park/Open Space	Area (ha)	Description / Existing Facilities	Proposed Facilities	Possible Improvements for Year-Round Use
Rouge Beach Park	3.7	• the most significant natural area along the waterfront • significant marsh area and sandy beach • waterfowl in marshland during breeding period • Rouge River (Katabokokong) and Little Rouge Creek flow through mainly undeveloped land • remnants of early settlement could be found throughout the Rouge valley • birds flypath • fishing in marshes • West Rouge Canoe Club • washroom not open in winter		• shelters for nature observation along pedestrian paths • restrict public use of marshes by providing fewer trails • provide transit access to the park • combine bus stop, information centre, security at the park's entrances • winterize washrooms
Total	530.6			

* East Point Park and Colonel Sam Smith Park are not completed and therefore not included.